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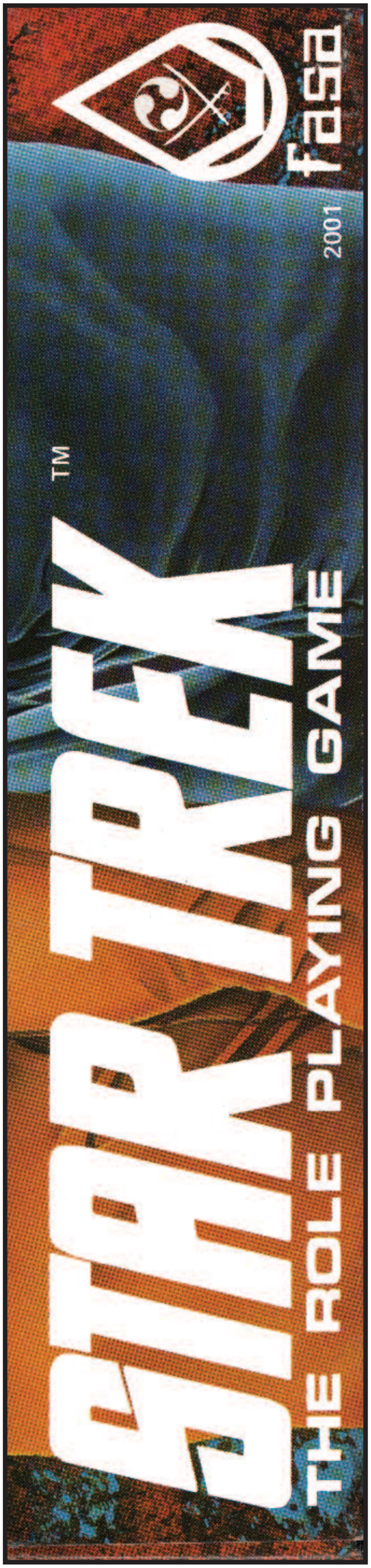


INDEX

Book 3

- 2 Forward
- 4 The United Federation of Planets
  - 4 Maps
    - 7 U.F.P. and Star Fleet Historical Update
      - 17 Origins
      - 18 Membership
    - 19 Sightseeing
      - 21 Starship Construction Facilities
      - 22 Spaceports
      - 32 Starbases, Handmaidens to the UFP
      - 36 Starbases, Select Profiles
      - 39 Guide to Luna, Sol 3
      - 43 Space Dock
    - 47 Major Worlds of the Federation
      - 81 Worlds of the Treaty Exploration Zone
      - 87 STMaps Almanac
  - 98 The Triangle Worlds
    - 98 Map
    - 99 Introduction
    - 100 Federation Affiliates
    - 105 Affiliation of Outer Free Worlds
    - 110 Independent Worlds
  - 124 Federation Member Species
    - 126 Alpha Centauran
    - 128 Arcadian
    - 130 Ariolo
    - 132 Arkenite
    - 134 Bzzit-Khaht
    - 136 Dayen
    - 139 Mixed Blood: Romulan/Vulcan
    - 140 Deltan
    - 142 Efrosian
    - 144 Kasheeta
    - 146 Xelatian
    - 148 Zaranite
    - 150 TAS: Skorr/Reptilians/Ciliates/Vedala
  - 152 Selected Personalities
    - 160 Familiar Characters
    - 166 Adversarial NPCs
  - 172 Gaming Tips
    - 172 A Final Frontier of your Own
    - 178 Role Playing the Final Frontier
    - 184 Gaming the Captain
    - 186 Buzzword Generator
    - 192 Quest for the Perfect Name
    - 193 Intro Adventure, "Ghosts of Conscience"
- 200 ST Maps, Introduction to Navigation
- 219 The FASA Timeline, in brief
- 221 ~ Fin ~

Forward

Book 3 is largely all the possible clippings from all the source material 'needed' to round out a Federation-based **character**

While the majority is FASA, a tad mine, also included is the text from Ballantine's Star Trek Maps as it is a relatively rare print and the main selling point, *the Maps,* are not here. Translating the warp and navigational theories into game play, the text makes a handy reference and good read.

Why stop there and not clip other data like the Concordance index or STTTM's Articles of Federation? For one, ST Maps directly impacts gameplay. Another is, yes, the line must be drawn.

Where the Tech Manual and Concordance in particular are plentiful and cheap on the likes of ebay, the likes of 'rare' books or the FASA Trek materials themselves most often go for collector-grade prices, far beyond their 'value'. They're also 40yrs old and quite delicate.

Decades out-of-print from a non-existent company also means money paid doesn't go to the authors. If lucky, you'll find a fellow gamer looking to get out for modest recompense. Profiteering off the modern hobbyist is just as likely found.

While the rare-other will pass along in any given condition, it's best these pieces go to the collector than the gamer-in-passing such as reading this. At ~40 years old, the original material is historical-interest at this point. These House Rules allow refined play.

Above all else, these librams of gainful conjurations are written and designed for *Trekkers* over regular gamers.

The Trekker likely has the Concordance and Tech Manual tattooed to their inner eyelids and recites them during sleep. A dedicated gamer *turned-Trek-fan* will get those originals for their library, *later*.

The Trekker who-may-game long-term needs the info to start and, if hooked, will pursue the museum-piece gaming materials for their own library, *later*.

Meanwhile at no costs nor profits, neither up nor down the line, the enterprising *Fantasimulations Associates-Trekker-GM* gets to game with their friends, *now*. Not later. :)

May the Great Bird of the Galaxy watch over your dice. LL&P, y'all.

- Jack Photon, 2022

Full-scale work on these books occured between May and July 2020. That effort was a 6-8 hours, every day for three months. 2020, what a summer!

My wedding anniversary, July 20, became my deadline for all three books. On completion, I took two weeks off and made Aug 20 my publication date with those last two weeks to polish and tweak the last typos out of existence.

August 18th, 2020. 10pm.

Book 1 and 3 have their final proofs printed out and loose leaf for final looks. Book 2's revisions were marked in a bound copy of the previous draft and finaled on computer, excepting some 10 last pages of the Psionics section.

I put the work down for a breather. It was hot. One of the stronger heat waves was in town and even 10pm was still bad. A break was needed.

Unknown to me, a case fan (or two) had died on my computer at some point and the system spontaneously shut down.

Crud. No problem. Just reboot. And... Power switch, spin up and shut down. Once more and... No... It's hot. Walk away for the night.

Next day I power up and get the BIOS graphic (odd as I had previously disabled that) before booting up.

Desktop is fine, but lo and behold, my five, 4tb disks with a sixth hot swap RAID 5 Project Drive says it needs formatting before use. Umm...

Reboot into the BIOS and all values have defaulted. I could not have been more devastated. 9tb of data sitting there but for the address book to find it all.

Understand, this is an 11tb RAID 5 with hot swap backup. This prevents drive failure in a number of ways but does not, as I just learned, protect against losing the RAID controller that makes the RAID so reliable against drive failure.

My over-assurance against drive failure and blind-spot to RAID controller failure led me to not back up recently enough to matter in any meaningful way. It's been nothing short of a digital lobotomy.

There is a top-rated RAID recovery program that I spent several hundred dollars on. Of some 9 terabytes of files, it found 95 gigabytes and every last text, image or other file type found was corrupt. 95gb of corrupt data on 9 terabytes.

As to this project, I had the three print-outs which I was then faced with scanning and OCR'ing back into the layout you now hold.

OCR would be a nightmare unto itself in many ways, so have kept the pages as image files, both raw .bmp masters and clean .tif work prints; and yes, multiple copies backed up on normal drives.

Fortunately, I was so far advanced in the work that the last fixes were relatively minor and easily made with a very old copy of photoshop.

Consequently, the more astute will note some font oddities here and there as, 2 years later, I don't remember any of the kerning, leading and other layout values that made this work what you see.

As I wasn't about to keep hot page design in photoshop when the original and all future work would be done in a very old copy of Quark, all image files were flattened into single layers (for those that know what all this means).

A lot of heartbreak on this project. Already prone to depression, this and the other near-9tb of data loss could not have sunk me lower. It was only in early 2022 that I was able to face this portion of that great loss.

A week of scanning and cleaning. Another two weeks of thinking, and final-drafting and I released the 3rd Edition Framework into the wild. With thanks to fans at Morena Shipyards, I've since made this last revision to my work in time for the 40th anniversary of the game's release.

Thus, from a 3rd Edition Framework to a 4.0th Fantaversary Revision. Maybe for the 50th anniversary I'll do another version, but otherwise, no.

If the original files can be retrieved off the RAID, (still in the same condition and only booted 3x in 2yrs) then I would consider updating those files.

That is the reason the pdfs are so large, each page is its own image, rather than mostly text.

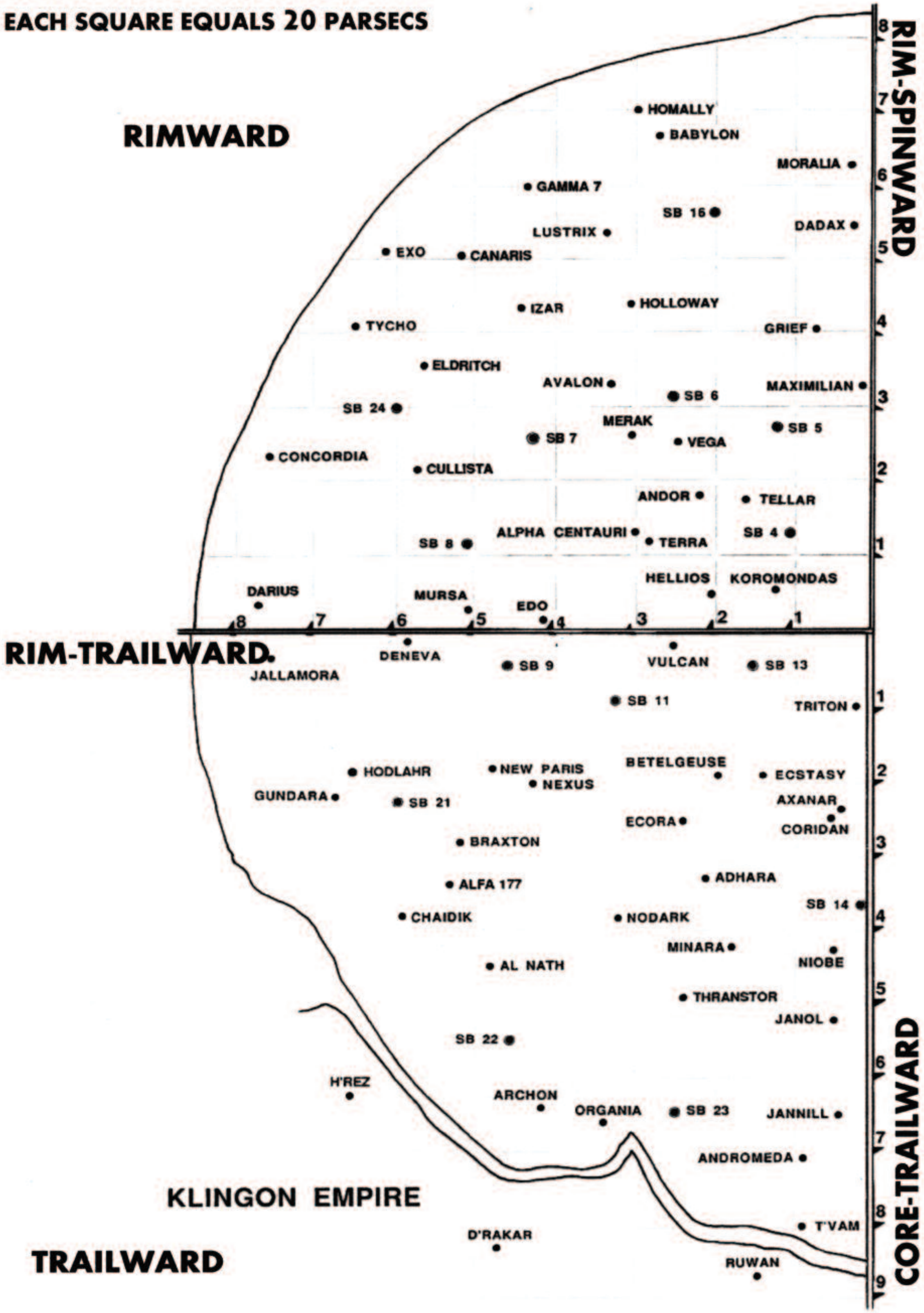
The original text files were a tenth the size of some of these current pdfs. Re-typing everything is not feasible, so I am left with these re-builds at the size you now find them.

These books are not for commercial use or sale, intended solely for personal gaming fun-times.

Please disseminate, but do not profit.
Nor is permission to crib my intellectual work given as it is found herein.
Mine!

You can find me at
jackphoton.space
or maybe on that
youtube thing.

- Jack Photon, 2023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RIM-TRAILWARD
CORE-TRAILWARD
KLINGON EMPIRE
TRAILWARD
HOMALLY
BABYLON
MORALIA
GAMMA 7
SB 16
DADAX
LUSTRIX
EXO
CANARIS
IZAR
HOLLOWAY
TYCHO
GRIEF
ELDRITCH
AVALON
MAXIMILIAN
SB 6
SB 24
MERAK
SB 7
VEGA
SB 5
CONCORDIA
CULLISTA
ANDOR
TELLAR
ALPHA CENTAURI
TERRA
SB 4
SB 8
HELLIOS
KOROMONDAS
DARIUS
MURSA
EDO
DENEVA
SB 9
VULCAN
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JALLAMORA
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TRITON
HODLAHR
NEW PARIS
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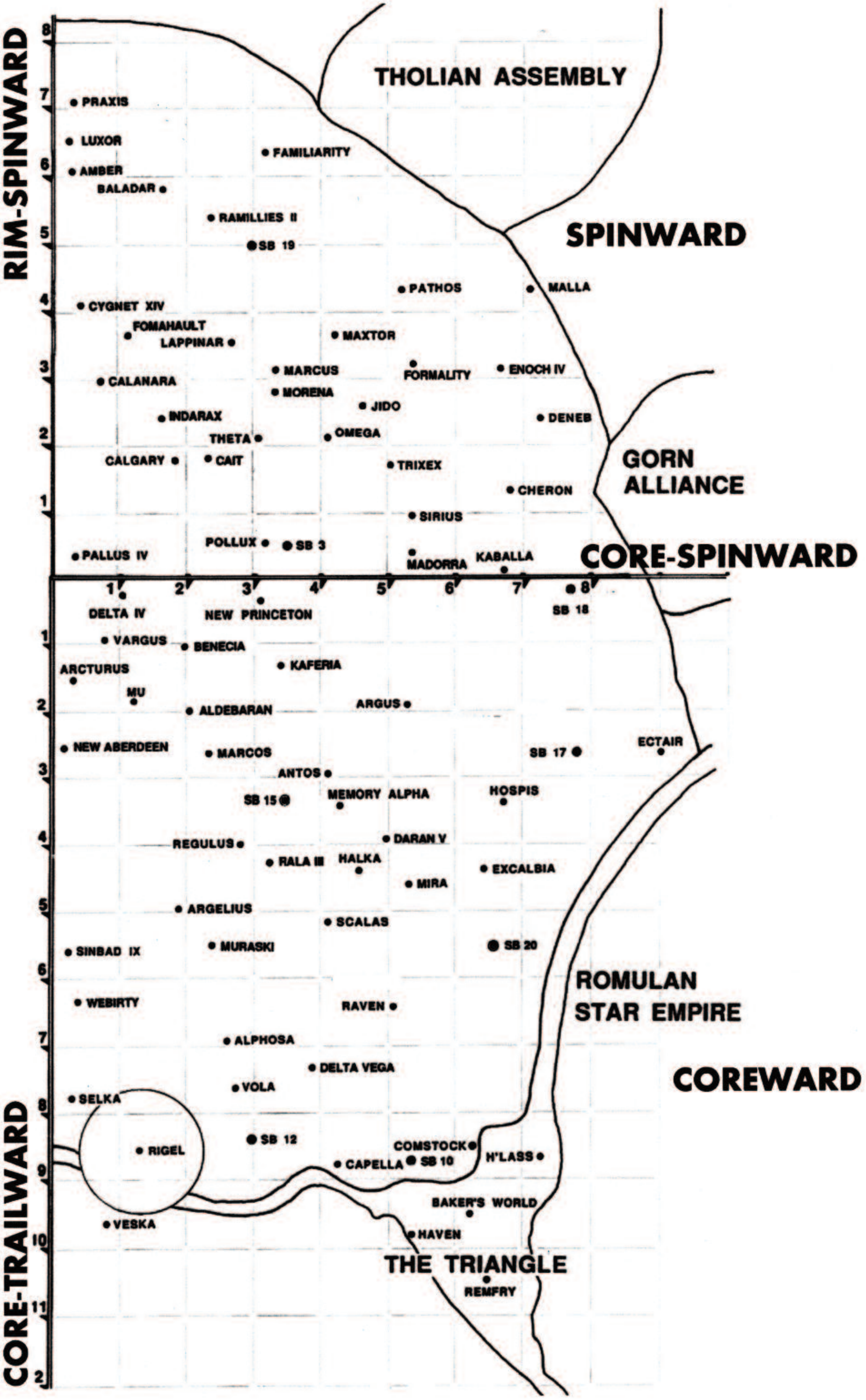
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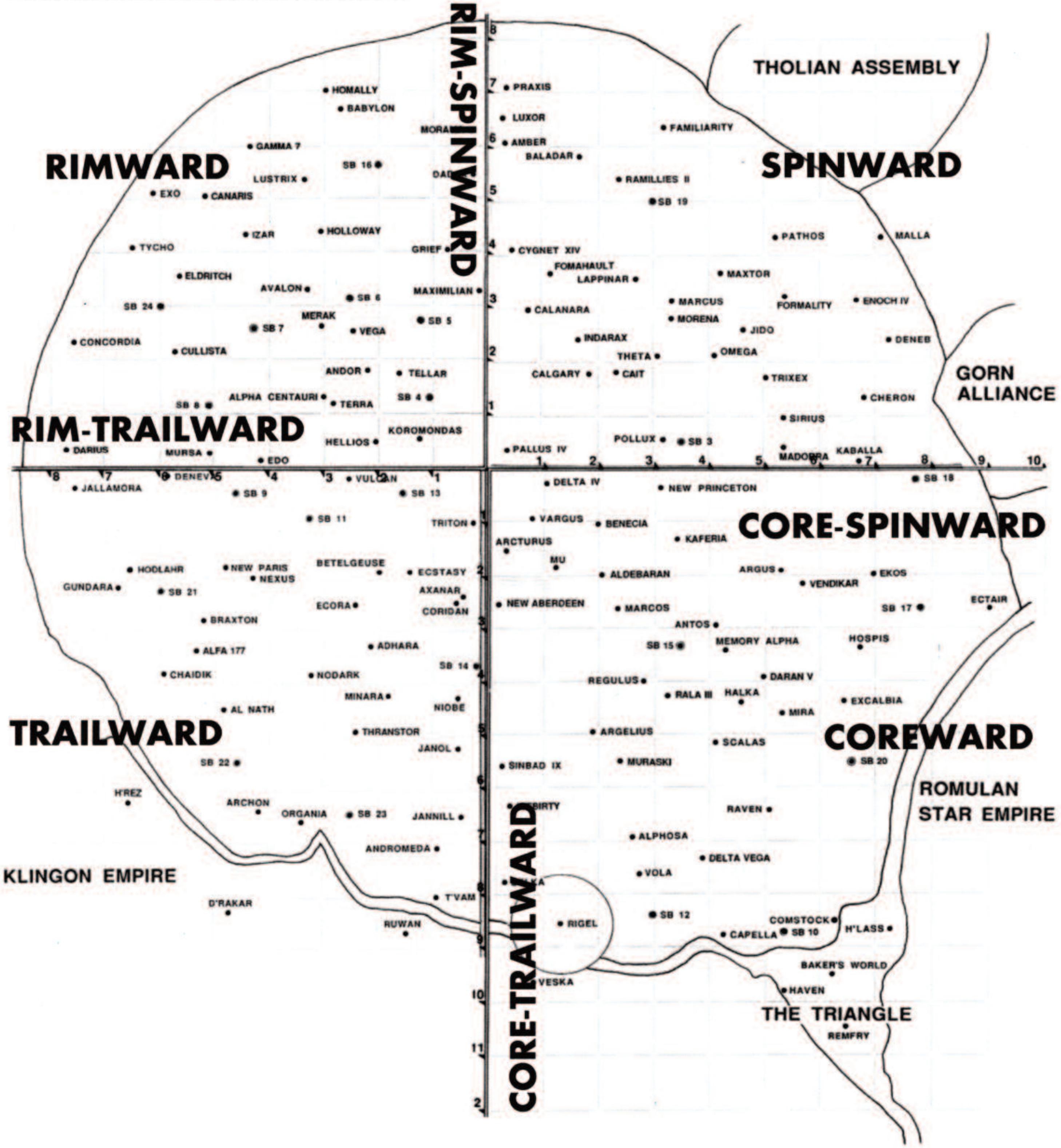
FOMAHAULT
LAPPINAR
MAXTOR
CALANARA
MARCUS
FORMALITY
ENOCH IV
MORENA
JIDO
INDARAX
DENEB
THETA
OMEGA
CALGARY
CAIT
TRIXEX
GORN
ALLIANCE
CHERON
SIRIUS
POLLUX
SB 3
PALLUS IV
MADORRA
KABALLA
CORE-SPINWARD
DELTA IV
NEW PRINCETON
SB 18
VARGUS
BENECIA
ARCTURUS
KAFERIA
MU
ARGUS
ALDEBARAN
NEW ABERDEEN
SB 17
ECTAIR
MARCOS
ANTOS
SB 15
MEMORY ALPHA
HOSPIS
REGULUS
DARAN V
RALA III
HALKA
EXCALBIA
MIRA
ARGELIUS
SCALAS
SINBAD IX
MURASKI
SB 20
ROMULAN
STAR EMPIRE
WEBIRTY
RAVEN
ALPHOSA
DELTA VEGA
COREWARD
VOLA
SELKA
SB 12
RIGEL
COMSTOCK
H'LASS
CAPELLA
SB 10
BAKER'S WORLD
VESKA
HAVEN
THE TRIANGLE
REMFRY
CORE-TRAILWARD

MAP OF THE FEDERATION
PLANETARY SYSTEMS ~2280

EACH SQUARE EQUALS 20 PARSECS



U.F.P. Historical Update

The United Federation of Planets (known as the UFP or simply "the Federation") is an interstellar political alliance composed of a number of individual planetary systems, including Earth, Vulcan, Tellar, Andor and a great number of other autonomous planetary governments. The UFP is basically a representative democratic organization, with each member world sending delegates to the Federation Council, the UFP's supreme governing body.

The UFP governs all interstellar relations among member worlds, and between the member worlds and other non-member governments. Although member worlds have a great deal of independence with regard to their internal affairs, Federation laws and regulations have precedence in interplanetary matters.

The gigantic Federation bureaucracy has the enormous task of regulating a Federation-wide monetary and credit system, coordinating scientific research and development of new technology, arbitrating interculture disputes, developing incredible data banks of scientific, technical and historical data on many worlds, encouraging interculture trade and cultural sharing, and many other governing tasks.

In some ways the UFP is analogous to our present-day United Nations. Unlike the UN, however, the member cultures have given over to the UFP the authority to govern, not just advise. The realities of interstellar distances and dangers led member cultures to give up a bit of their independence to insure mutual security.

The two most important jobs of the UFP are protection of UFP citizens and exploration of the galaxy. Both of these tasks are largely the job of Star Fleet Command, the arm of the UFP entrusted with peacekeeping, law enforcement, trade regulation, and exploration. For more information of Star Fleet Command's duties, powers, and internal structure, see the next section.

The area of the galaxy known as "Federation space" is by no means limited to Federation-member cultures alone. Though membership in the Federation is considered beneficial, it is in no way compulsory. Many non-member cultures exist within Federation territory, and live quite peacefully alongside their Federation neighbors. (The Orions are one such culture, though that particular relationship is constantly strained by privateer operations, despite Orion "neutrality".) On non-member worlds, Federation law is not in force, though many such worlds have extradition treaties, trade agreements, and mutual protection pacts with the Federation.

Those nearby friendly cultures who do not join the UFP usually have ambassadors sent to them to represent Federation interests in interstellar matters. Cultures not sufficiently advanced to be Federation members may become Federation protectorates if they wish, enjoying the benefits of advanced Federation medical and technical knowledge in developing their culture to a higher level.

Cultures within the Federation sphere of influence that are not intellectually or socially prepared to enter interstellar society or accept the idea of interstellar travel are watched over carefully by Federation sociologists with the help of Star Fleet. The Prime Directive (also known as "General Order 1") is the most important UFP law. It states that the normal and healthy development of alien life and culture may not be interfered with by the UFP.

This means that UFP member cultures are prohibited from influencing the cultural development of a more primitive world by manipulating it's growth through superior knowledge or strength, or by providing a culture with advanced technology it is socially unprepared to use wisely. The Prime Directive may be violated only under the most extreme circumstances, such as when accident (*A Piece of the Action, Patterns of Force*) or deliberate action by an outside source (*A Private Little War*) have already upset the cultural balance of a world, to the immediate detriment of its people and causing a threat to the security of the Federation.

The chief interstellar rivals of the UFP are the Klingon Empire and the Romulan Confederation. Both cultures are long-time rivals of the UFP, though the Romulan conflict goes back farther, to the early days of the Federation.

The first encounter between the spreading Romulan Confederation and the then-youthful Federation came in the days before Warp Drive, over a hundred years before the current voyages of the Enterprise and her sister ships. War was inevitable in this conflict between Romulan expansionism and Federation exploration, but such a war had never been fought before.

The entire conflict was fought ship-to-ship. The Romulans took no prisoners and the Federation never had opportunity to capture a Romulan vessel. (Romulan captains do not surrender. They instead destroy a crippled vessel — and all aboard — when defeat is assured.) Thus, neither side ever saw the other face-to-face, nor discovered the location of the other's homeworlds.

The war was terribly costly in men and materials for both groups, and neither was able to gain any sort of decisive edge. Finally, an armistice was declared, with a treaty drawn up after negotiations by subspace radio.

A neutral zone was established between Romulan-half space and the borders of the UFP. Entry into this area by either side was to be considered an act of war, with both sides setting up border monitoring stations to assure no ship would get across undetected.

The treaty remained unbroken until a lone Romulan ship, armed with a devastating plasma weapon and protected from detection by a sensor/visual "cloaking device", crossed the neutral zone and destroyed several manned Federation outposts. The ship was engaged by the U.S. U.S.S. Enterprise and pursued into the neutral zone. At this time, a skillful sensor probe penetrated the Romulan ship and UFP representatives got their first look at a Romulan. (See episode *Balance of Terror* for more information.)

With no evidence remaining of Romulan incursion across the neutral zone, the treaty remained in force. There have since been other incidents, but an uneasy peace is maintained, largely because neither side wishes to risk the wholesale destruction implicit in a declaration of open war.

The Klingon Empire is a slightly more recent rival of the UFP, but the situation between the two cultures rapidly degenerated to the brink of open war. The Klingon social order can tolerate no culture other than their own. To the Klingons, domination of all within their reach is their destiny and their right. UFP/Empire relations were poor right from the first, but the final breaking point came with the Klingon invasion of the neutral planet of Organia.

The U.S.S. Enterprise, representing the Federation, was visiting Organia with an offer of protection from the spreading Klingon Imperial hold when the invasion came. Much to the horror of the peace-loving Organians, the two forces prepared to wage total war over Organia. Fortunately for galactic peace (but much to the consternation of both forces' commanders) the Organians were not the simple, humanoid formers and peasants they at first resembled.

In actuality, the Organians proved to be highly advanced beings of pure thought energy, taking on human-like form in an attempt to put their visitors at ease. The Organians abhor violent conflict, and their incredible mental powers gave them the clout to back up their wishes for peace between the Klingons and the UFP.

The Organians drew up a peace pact (now known as the Organian Peace Treaty) and imposed it on both sides. It provides for the disputed area between the UFP and the Klingon Empire to be a protected zone administered by Organia. Inhabited planets in this area are protected by Organian mental might, and uninhabited class "M" worlds are to be developed under the guidance of whichever side is judged to be able to develop the world most efficiently. Forces of both governments in the disputed area must extend courtesies to their opposite numbers, with shore leave, medical attention, etc. to be allowed for members of either culture at bases within the disputed area. So far, there appears to be no way for either side to circumvent the Organian edict in any significant way.

Because of the Organian treaty, the Klingon Empire has had to resort to more subtle means than outright force to gain a toehold in the disputed area. They keep trying, however.

Most recently, Federation intelligence agents have discovered that the Klingon Empire and Romulan Confederation have made contact and concluded a widespread use of more advanced Klingon ship design and hand weapons among Romulan forces. Certain items of Romulan technology, including plasma weaponry, have become known to the Klingons. It is expected that though the Romulan plasma weapons are somewhat outdated, the Klingons will be able to merge this knowledge with their own technological knowledge and develop an analogue to Federation photon torpedo weapons within a few years.

Meanwhile, Federation expansion continues in other directions, with many cultures accepting Federation offers of membership or at least mutual protection and trade agreements. Two notable exceptions are the Gorn Alliance and the Tholian Assembly. Like the Romulan incident, first contact with both the Gorn and the Tholians led to immediate violence.

The Gorn first encountered a Federation base newly established in an area of space they claimed as their own. They reacted with typical Gorn brashness; they destroyed the base and everyone stationed there. Arriving in response to the base's distress call, the U.S.S. Enterprise pursued the fleeing Gorn ship into an uncharted area of the galaxy.

Once again, however, interstellar war was averted by the intervention of a preternaturally powerful race of beings. The Metrons refuse to allow two intellectually inferior species to wage total war in their area of space. They propose to settle the matter by placing both ships' commanders on an uninhabited asteroid to settle their differences with a personal combat to the death.

Captain James Kirk of the U.S.S. Enterprise won the combat, building a hand cannon from native materials as a weapon to offset the Gorn commander's greater physical strength and endurance. Captain Kirk refused to end the conflict by slaying the helpless Gorn, however. The Metron representative, impressed by Kirk's restraint, returned both commanders to their ships and transported them outside Metron territory. Talks were established with the Gorn, leading to an uneasy peace. The Gorn Alliance is too small and underdeveloped technologically to be a match for the Federation alone, but their warlike nature and refusal to negotiate a lasting peace make them a constant danger to Federation security. The Gorn Alliance is officially recognized as an unfriendly power, but no declarations of war have been made, or are likely to be made in the near future.

The Tholian Assembly was known to the Federation by reputation among cultures encountered in the area long before any direct contact. First direct confrontation between the UFP and the Tholians came when the U.S.S. Enterprise (say, those folks get around, don't they?) was searching a previously uncharted region of space for the missing U.S.S. Defiant. The Enterprise is crippled by power loss caused by a tear in the very fabric of space-time, and attempting to retrieve the ship's captain, lost in space-time interphase while investigating the disabled Defiant.

At this time, a Tholian patrol vessel arrives, informing Enterprise First Officer Spock that the ship is encroaching on Tholian space. Despite Cmdr. Spock's efforts to explain their mission, the impatient Tholians finally open fire on the Enterprise, forcing the Federation vessel to return fire and cripple the Tholian ship.

A second Tholian vessel soon arrives, and the two ships begin weaving a Tholian tractor web about the damaged and power-loss hampered Enterprise. The Enterprise crew manages to rescue their captain and escape the Tholian tractor field, but the Federation is started off on the wrong foot with the mysterious Tholians.

At this time, little else is known about the Tholians or their government. Federation vessels attempt to avoid Tholian space, as the Tholians have made it clear that they do not wish visitors. However, the exact boundaries of Tholian-claimed space are not known, and those that are known keep being pushed outward by the Tholians. Eventually, if agreements cannot be made between the two governments, armed conflict on a larger scale may result. For now, the Tholians do not seem disposed to either make war or discuss peace.

STAR FLEET TABLE OF RANKS

Recruit
Enlisted Second Class
Enlisted First Class
Petty Officer Second Class
Petty Officer First Class
Chief Petty Officer
Senior Chief Petty Officer
Master Chief Petty Officer
Warrant Officer
Chief Warrant Officer
Ensign
Lieutenant Junior Grade
Lieutenant
Lieutenant Commander
Commander
Captain
Commodore
Admiral

Attendees of Star Fleet Academy carry the rank of Cadet. While on the Cadet Cruise they carry the rank of Midshipman. Both of these fall in between the ranks of Chief Warrant Officer and Ensign. The Cadet and Midshipman are treated with the respect and courtesy due an officer, but do not yet carry the full responsibilities as such.

STAR FLEET CHAIN OF COMMAND (Vessel)

Captain
First Officer
Chief Engineer
Chief Navigator
Chief Helmsman
Chief Communications Officer

On occasion, the captain of a vessel may be unable to command. The reasons are numerous; the captain may be planetside, he may be ill or injured, etc. This table gives the chain of command, or sequence, to be followed under normal circumstances. If any listed personnel are also unavailable, simply skip to the next available officer. Once these possibilities are exhausted, the chain of command follows the ranks from senior officer present on down.

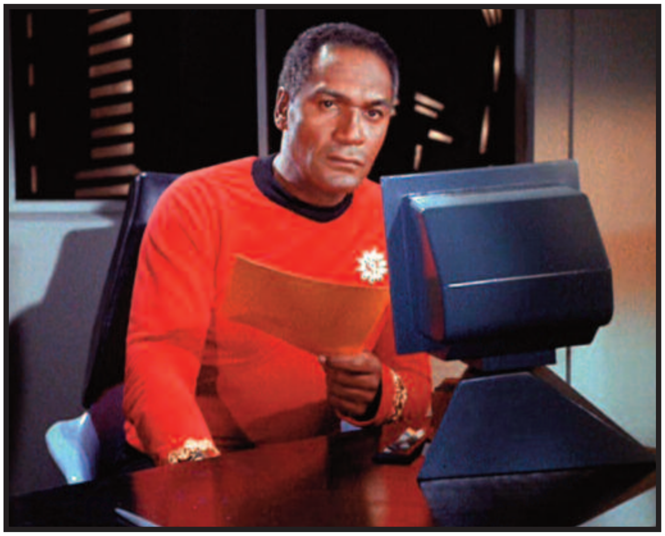
STAR FLEET CHAIN OF COMMAND (Planetside)

Base Commander
Deputy Base Commander
Chief of Staff
Chief Engineer
Chief Communications Officer

Same procedure as for vessels. Some bases may not have all positions listed. This the case, merely skip the position.

RANK AND POSITION--A QUICK DISCUSSION

It is important to denote the difference between rank in star Fleet (Chief Petty Officer, Ensign, Lieutenant, etc.) and Position aboard ship (Transporter Chief, Chief Navigator, Communications Officer, First Officer, etc.) The distinction is an important one in character creation and in other very important game subsystems.



Rank is supposedly a distinction based on experience, ability, and degree of responsibility. Rank crosses all divisional lines in Star Fleet, with the same system of ranks being used by scientist and soldier alike. Rank affects duties performed only in regards to chain of command within your division and the appropriateness to command responsibility of various rank levels in various command positions.

Some specific jobs can only be held by a person of sufficient rank. For instance, the commander of a Constitution class starship must hold the permanent rank of Captain or above. Though an officer of lesser rank may command for a time in the field, an officer must be elevated to the rank of Captain before being given permanent command of such a vessel.

This is not necessarily true of all such positions. A science officer aboard a Constitution class vessel must have the rank of Lt. Commander or above, but on a smaller vessel the position may be filled by a Lieutenant, an Ensign, or possibly even a non-com on a very small ship.

Under general conditions, an officer must take the orders of an officer of higher rank. There are exceptions, however. Orders or tasks given by superior officers that are in direct supervision of your activities (such as Science Officer over science specialists) may sometimes take precedence over orders given by superior officers of other departments. Also, a superior officer's orders may be countermanded by medical authority or by the next lower officer in chain of command if proof can be shown that said officer is in dereliction of his duty or is unfit mentally or physicially for command responsibility. Such cases are extremely rare, however.

When referring to a character in a general sense, he/she is referred to by rank (Lt. Uhura, Ensign Chekov, Lt. Cmdr. Scott).

Position is a measure of immediate responsibility and specific training, and does not in itself convey the privileges of rank. One's position aboard ship denotes what type of duties one performs. Position also affects chain of command, in that officers in certain positions are not eligible to command a vessel no matter what their rank, as long as an officer in an eligible position is available.

The terms "First Officer", "Science Officer", "Transporter Chief", "Yeoman", "Helmsman", etc. all denote positions, not rank. A yeoman, for instance, is a clerical position as an aide to an officer. This is not a position of particularly high responsibility, usually, so lesser ranking personnel will normally be found in it. Janice Rand in the STAR TREK TV series, for instance, held the permanent rank of Ensign and the title or position of Captain'sYeoman. Christine Chapel, also an Ensign, held the title/position of Chief Nurse. Later (in *STAR TREK: The Motion Picture),* both officers had been assigned positions of greater responsibility (Transporter Chief and Medical Officer, respectively), and had also attained rank (Lieutenant) appropriate to such responsibility aboard a major vessel.

A character is referred to by the title of his/her position when dealing with that character's specific responsibilities in that position. Thus Captain Kirk might introduce McCoy as "Chief Surgeon McCoy" or simply "Dr. McCoy" because what McCoy does aboard ship is more important than his rank.

One area of confusion occurs because of the similarity of the rank of Chief Petty Officer and positions such as Transporter Chief, Chief Engineer, etc. Both types of characters may be referred to informally as "Chief Smith", for instance, but the former is a permanent rank, while calling the latter two "chief" is only providing the respect due an officer who has such important responsibilties.

In fact, there is one position that is accorded a special measure of respect – that of commander of a vessel in space. The person in command of a vessel is that vessel's "captain". Such a person, while on board her/his ship or performing duties relating to that ship is always referred to as "Captain Smith", even if the permanent rank is lower. Thus, a small scout ship bearing three or four low-ranking officers is commanded by "Captain Smith" even if the officer Smith is only a Lieutenant! Off the ship, or in general terms, that officer is "Lieutenant Smith". Either way, Smith is still subordinate in rank to Lt. Commanders and higher ranking officers.

Another privilege also peculiar to the captaincy is the fact that it is possible for a lesser-ranking officer to have direct command responsibility over a higher ranking officer, if the lesser ranking officer is "in command" of the vessel. In practice, Star Fleet attempts to avoid assigning higher ranking personnel to duties aboard ships commanded by lower ranking officers, but it can and does happen from time to time. If so, the "captain" has direct command over the higher ranking officer, if the higher ranking officer has a position subordinate to the captain. This would, then, not grant command control over a visiting admiral, but would give a lieutenant command responsibility over a Lt. Commander if the Lt. Commander were assigned as Science Officer on a temporary basis.

The succession of command responsibility (in the event that the assigned commander cannot fulfill his or her duties) is dependent on neither rank nor position, solely. It depends, rather, on established chain of command. For an explanation, see the chain of command notes in the section on Star Fleet organization.

One final note: the term "Mister" in naval parlance is neither a mark of rank or position. Any commissioned officer may be referred to in a general sense as "Mister". This is used by a lesser ranking officer as a term of respect, or by a higher ranking officer as a formal or informal mode of address. It is never used for someone who has a medical degree. (Thus, always "Dr. McCoy", never "Mr. McCoy"). It is also never used for the commander of a star vessel while in active pursuit of those duties, no matter how high-ranking the officer speaking.

A higher ranking officer may call a lower ranking officer simply "Mister", leaving off the name entirely, but this form of address is usually reserved for reminding the officer addressed of his subordinate status. (An annoyed Kirk might snap, for instance, "Get us back on course, Mister, and right now!")

"Mister" is a term used across sexual barriers as well. Thus, a female officer is never referred to as "Miss Uhura" or "Ms. Chapel" except very informally. If the term "Mister" used to address a woman is annoying or undesired by either the officer speaking or the officer being addressed, the rank or title is substituted. Thus, while Uhura was always called "Lt. Uhura" on the TV series, and Christine Chapel was always called "Nurse Chapel", Lt. Saavik in *The Wrath of Khan* was referred to as "Mr. Saavik". The usage for women is a matter of personal preference.

UNIFORMS

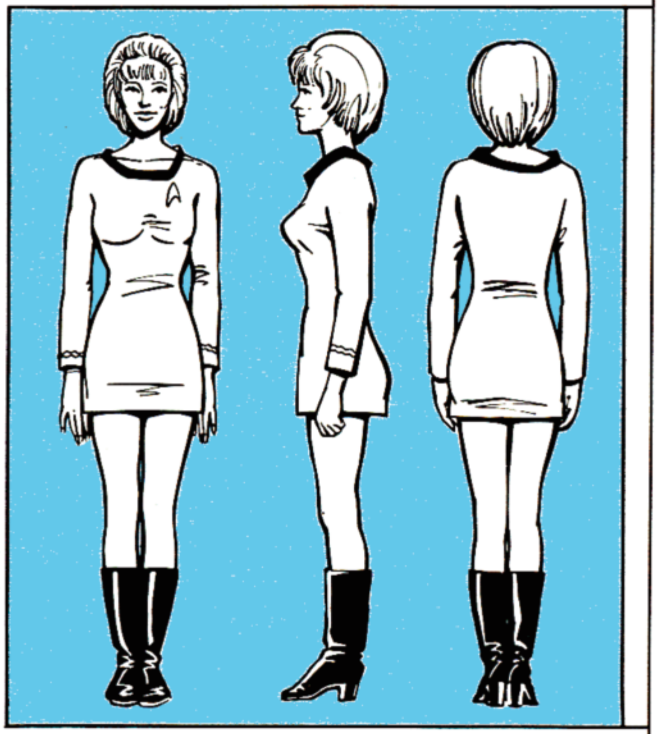
All Star Fleet personnel wear the same basic uniforms. Male personnel wear a tunic color-coded according to division (command, sciences, and engineer/support), black trousers, and black boots (see illustration).

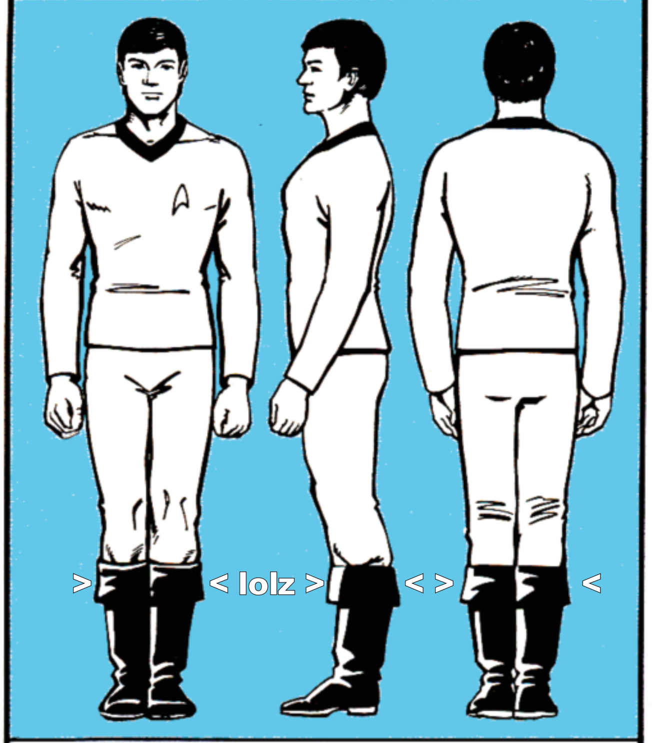
Female personnel wear the uniform as shown below, consisting of a color-coded tunic, pantyhose, and black boots.

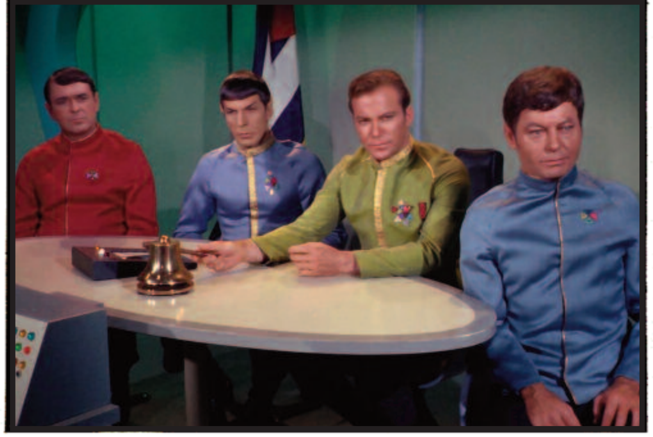
Dress uniforms also consist of a tunic and black trousers and boots. The tunic resembles a jacket, as seen in the illustration below. Notice the high collar and gold stripe down the front. A thin stripe is used for department heads, while a wide stripe is used for the captain and first officer. These tunics seal down the front with material similar to our present-day velcro. Also note that the trousers are bloused higher than with the duty uniform.

All tunics are color-coded according to job division; yellow-gold for command, blue for sciences, and red for services. Command includes captain, first officer, helmsmen, and navigators. Sciences includes all science related positions, including medical. Services includes engineering, security, fabrication; generally, anything that does not fit in the other two categories.

Many other uniforms are used by Star Fleet; ceremonial, outerwear, vac-suits, combat, etc., which are too numerous to be covered in detail here.

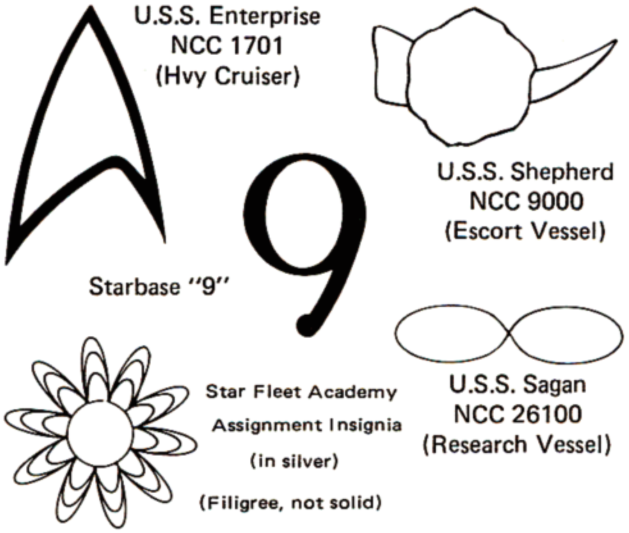




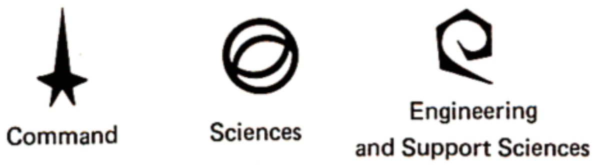


INSIGNIA

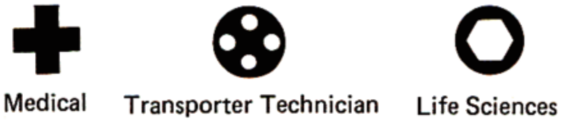
All uniforms carry insignia denoting rank and current assignment. The assignment insignia worn on the chests of officers and sleeves of enlisted personnel vary according to vessel served on or base assigned to. Each vessel or base has a unique insignia. The basic shape of the insignia will be the same for all personnel assigned to that particular vessel or base. The appropriate division device (see below) will be placed on this assignment insignia. There are thousands upon thousands of different assignment insignia. Shown below are some examples. Note that some variation is possible. Some vessels use individual devices for medical, security, etc. instead of the normal sciences, command or services insignia.



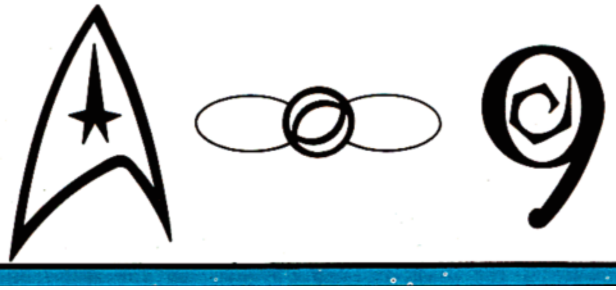
DIVISION (DEPARTMENT) INSIGNIA



VARIATIONS IN USE



COMBINATION EXAMPLES



RANK INSIGNIA

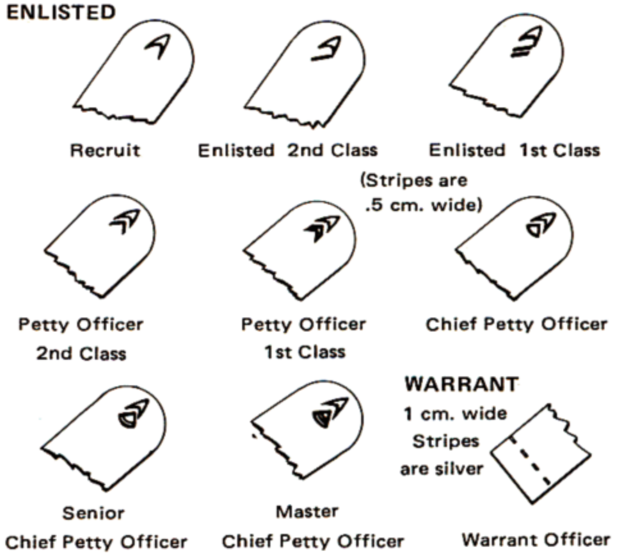
Shown below are the rank insignia worn on the duty uniforms. Officers' rank insignia are worn slightly above the cuff on both sleeves. Enlisted rank is worn midway between the shoulder seam and elbow on both sleeves. Officer rank insignia is gold, warrant officer, cadets, midshipmen, and enlisted ranks are in silver.

Note that Enlisted ranks wear assignment insignia on sleeves but not chest. Officers wear assignment insignia on chest but not sleeves.

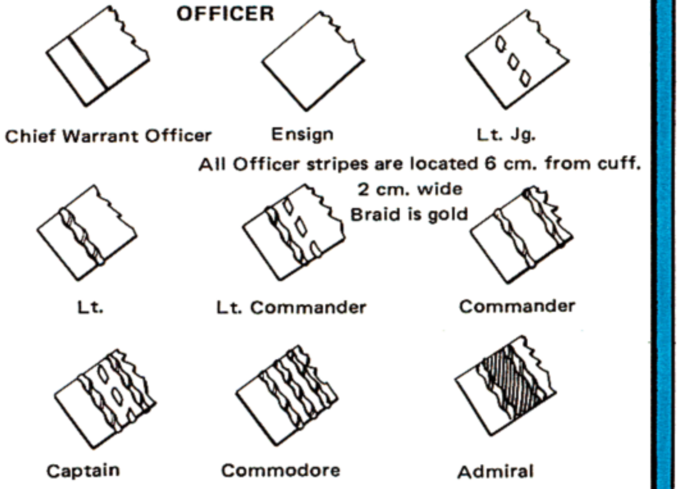
STAR FLEET RANK INSIGNIA

Assignment insignia is located 3 cm. below shoulder seam. Rank stripes/insignia are black. Distance between assign/rank is 3 cm.

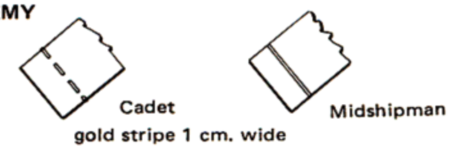
ENLISTED



OFFICER



ACADEMY

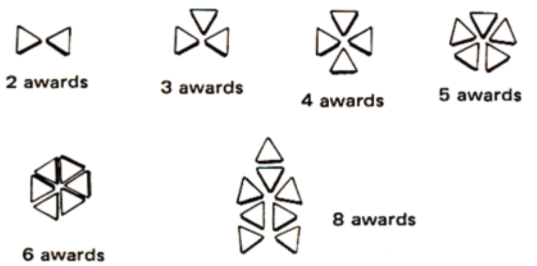


DECORATIONS

Most decorations and awards in Star Fleet are triangular, with the color of the triangle varying by award. They are worn on dress and ceremonial uniforms only. These are worn in a single grouping in various geometric patterns. Several examples of positioning are shown below.

Only the highest awards or non-Star Fleet awards (presented by other governmental entities) are non-triangular.

DECORATION LAYOUTS (See Dress Uniform photo)



Awards are placed almost touching so patterns will be tighter than those shown.

ORGANIZATION OF STAR FLEET

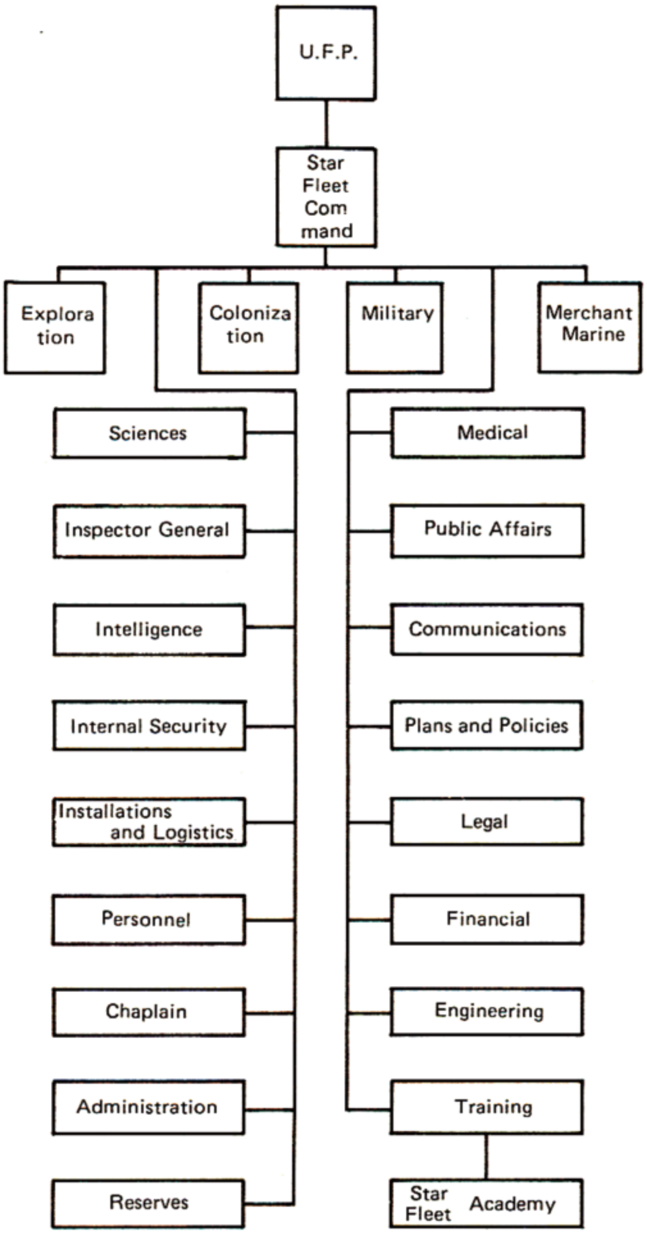
Star Fleet was brought into existence to act as the peace-keeping force of the United Federation of Planets. Similarities do exist between the UFP and today's United Nations. One major difference, however, is the fact that where today's UN members' military forces are non-permanent (assigned as needed temporarily), the UFP's Star Fleet is a single permanent entity. Any member planet's inhabitants may join Star Fleet if the individuals can meet Star Fleet's rigorous requirements. The fact that one force exists to act as military, police, and explorer shows how truly united the UFP members are.

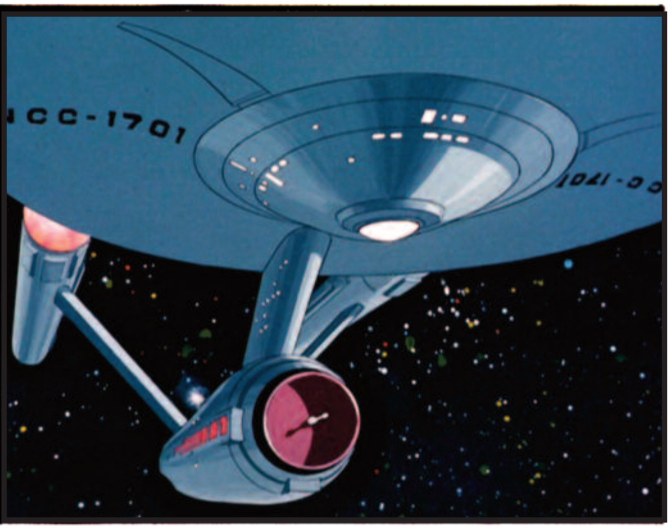
Star Fleet is responsible for the protection of the Federation, the exploration of unknown areas, the colonization of habitable planets, and the safe transport of individuals and goods.

Star Fleet is composed of many departments. The four main departments are exploration, colonization, Military, and Merchant Marine. There are 17 smaller departments. All 21 departments draw upon individuals from the three divisions: command, sciences, and services. Also, individuals from all 21 departments cross over into other departments as needed. For example, the Enterprise is in the Exploration department. There are members from all three divisions (command, sciences, and services). There are chaplains, engineers, medical personnel, etc. on assignment to the Enterprise.

Basically, personnel from any department may be assigned to any vessel or base. On assignment, they report to their department head. The department head reports to the vessel's captain or base commander.

STAR FLEET ORGANIZATION





All personnel on Constitution class vessels are ensign grade and above. These ships are the best and the crews are the elite of the elite.

One item to note is that unlike today's military organizations where each department has its own planes, or vessels, etc., Star Fleet is a truly unified organization. The inter-service rivalries of the twentieth century are gone. The bickering and competition for better equipment than the other branches of service is virtually eliminated.

The 21 departments of Star Fleet are shown in table form below, then described briefly.

STAR FLEET COMMAND

Star Fleet Command (SFC) is the entity responsible to the UFP council for all actions of Star Fleet. "The buck stops here" is very appropriate to Star Fleet Command. When the size of the Federation is considered, along with the time necessary for communications, it can be seen how all units in Star Fleet are somewhat autonomous. However, SFC is broken down into 17 districts, each with one Star Base. These Star Bases are responsible for direction of all personnel and vessels in their command. Star Bases are commanded normally by a commodore.

Each Star Base will have thousands of personnel, vessels, and smaller bases under its jurisdiction. Constitution class ships (of which there were 12) are assigned as needed to Star Bases. These vessels operate independently, answerable only to the Star Base they are assigned to. These ships are rarely assembled into fleets except for short periods of time.

There are fleets under the jurisdiction of Star Bases. These may have any number of ships in them depending upon mission. Fleets may be assembled with several escorts protecting a convoy of colonization vessels, or tens of ships into a battle fleet in reaction to an attack on a border. A fleet may consist of several research ships, or research ships with military escort. Merchant marine ships could travel together for safety. The list is endless. Fleets are normally assembled only for short periods of time (a few months to a year) for specific missions (be it a diplomatic mission or a border skirmish). Normally, however, once a ship (except Constitution Class) is assigned to a star base it stays with that star base for the duration of its useful life due to the vast distances involved.

EXPLORATION

The Exploration Department is responsible for the exploration of the unknown areas of the galaxy. The department has vessels of all sizes, ranging from scouts with 5-man crews to the Constitution class starships with a crew of 430. Captains of exploration ships must be capable of independent action. They are far from higher command in time and space. In many instances, they are the first contact with new civilizations. They are like the explorers of old, establishing trade routes, fighting skirmishes (always defensively), acting as ambassadors of the UFP, and much more.

This department is also responsible for mapping all areas of the galaxy, finding planets to colonize by overcrowded UFP members, and making hazards known to other vessels.

COLONIZATION

The colonization department is responsible for settling suitable planets. Exploration finds appropriate worlds, and then the colonization personnel move in. First, a small (20-100 crew) survey ship makes a more thorough study of the planet, to make certain no intelligent native life is threatened and to survey and map the planet thoroughly. Studies are done of native flora and fauna. Possible sites for settling are determined. Geological formations are studied to determine if the planet has possibilities as an exporter of mineral wealth. At all times, a concerted effort is maintained to make sure the ecology of the planet will not be upset. Integration, not domination, is the watchword in Star Fleet.

Once the survey ship is satisfied that all is well, a medium size (25-150 crew, 200-750 permanent settlers) ship is sent to establish a small permanent colony (or colonies). A port and transporter facilities are among the first projects. Then come quarters, offices, and shops (maintenance). This group of colonists are the advance guard, so to speak, of the larger vessels that will arrive shortly, bearing thousands of colonists.

The largest colonial ships can carry up to one thousand people and their personal belongings. Once a permanent settlement has been established and no problems have been encountered, these ships arrive. They usually travel in groups with an escort of armed vessels. The number of ships depends on the size of colony to be established.

MILITARY

Yes, Star Fleet does have a military. Although Star Fleet and the UFP have peaceful goals, there are those who have other ideas, like the Klingons. The military department exists solely for defensive purposes. The military acts also as the "police" of the Federation, as no matter how peaceful militarily a people are, there will always be the thieves, pirates, and crooked con-men to be pursued.

The military has many different types of ships, some extremely powerful, but none to match the overall effectiveness of the Constitution class. Some ships may have more weapons than the Constitution, but none have the power and the quality of crew.

The military, besides having starships and fighting crews, also fields impressive ground forces. The ground forces are Marines, much as present day Marines cooperate with the Navy. These Marines are used as planetside police, as guards at large bases, and as defensive fighting units on hostile worlds.

It must be remembered that the military acts defensively only! Star Fleet does not exist to take over the galaxy, but to insure the peaceful coexistence of all peoples.

MERCHANT MARINE

The Merchant Marine is the trading and transport arm of the Federation. All merchant ships, privately owned or Federation owned, are regulated by this department. Most merchant ships are not armed unless they are normally involved in trade on the Federation's borders. The Merchant Marine is the source for many of the private and commercial traders. They will attend the Academy or just serve as crew to 'learn the trade'. The Merchant Marine relies on the military branch to enforce the trading laws, having no enforcement vessels of its own.

Merchant Marine vessels range in size from ships carrying a few metric tons or passengers to ships carrying thousands of tons or hundreds of passengers. Here is where you will find liners rivaling twentieth century ships like the Queen Elizabeth II. Many ships have no live crew, being robot freighters. These ships are normally found on 'tame' routes deep within the Federation boundaries and safe from pirates and enemies.

SCIENCES

The sciences department encompasses any and all fields related to scientific research. Astronomy, astrophysics, geology, ecology, physics, and on and on. Research is carried out in a multitude of universities, space stations, laboratories, and ships. Research is funded by the UFP, corporate and private donations, and Star Fleet itself. Many of the science personnel are assigned to vessels in the Exploration and Colonization departments.

Responsible for research and development of all types not specifically under the jurisdiction of any other department.

INSPECTOR GENERAL

The inspector general's department is responsible fo for keeping Star Fleet personnel honest. This office conducts audits and investigations of any suspected wrongdoing.

INTELLIGENCE

This office is responsible for collecting data concerning any forces hostile to the Federation. This office would gather information about military forces, their disposition and strength, and possible motives. Data about enemy civilian locations, their ways and settlements, economy, habits, etc. would be collected. In short, the Intelligence Department collects data concerning anything about possible hostile forces. They must also keep all hostiles from accomplishing the same tasks with the Federation.

INTERNAL SECURITY

Responsible for providing security within Star Fleet itself, be it the individual who partied too much while on Shore Leave or assisting the inspector general on an investigation. These are the 'shore patrol' of Star Fleet.

INSTALLATIONS & LOGISTICS

This is the quartermaster of Star Fleet. The I&L is responsible for the construction and maintenance of all bases, be they planetside or space station. This department is also responsible for supply of all installations and vessels.

PERSONNEL

Responsible for recruitment of new personnel and records of all members of Star Fleet, active or retired. Responsible for appointments, promotions, awards, and decorations.

CHAPLAIN

Responsible for the religious and moral well-being of Star Fleet personnel. Most large ships carry at least one Chaplain.

ADMINISTRATION

Controls correspondence, prepares and distributes forms, manuals, regulations, etc. In short, the secretaries of Star Fleet.

RESERVES

Responsible for keeping track of inactive Star Fleet members, for recall if necessary in an emergency situation. Fleet personnel may retire after almost any length of sevice, but Star Fleet doesn't lose sight of these valuable personnel.

MEDICAL

Originally part of the Sciences Department. It still is part of the Sciences Division, but became so large that Star Fleet made it a separate department. Psychology as well as microbiology, surgery, etc. are all here. This department has many personnel in the Exploration Department to study life on new worlds.

PUBLIC AFFAIRS

Handles community relations in areas where Star Fleet has bases near civilian populations.

COMMUNICATIONS

Handles communications of all types, whether it's sending a message within a ship or across the galaxy. Does R&D on communications equipment.

PLANS & POLICIES

Examines all plans & policies of Star Fleet to insure that they are in line with current doctrine.

LEGAL

Handles all legal matters within Star Fleet and in dealing with the public, up to and including court-martials of Star Fleet personnel.

FINANCIAL

Responsible for all monetary matters, including payroll, retirement funds, investments, monetary disputes, and funding for new projects, ships, and bases.

ENGINEERING

Responsible for maintenance, construction, and research of power units and related equipment for bases and vessels.

TRAINING

Responsible for the training of all Star Fleet personnel. Star Fleet Academy is part of this department. Normal entrance age for the Academy is 18, however exceptions are regularly made for exceptionally promising students. James Kirk entered at the age of 17. Star Fleet Academy is examined closer in the character creation rules of this game.

There are many other schools and institutions available to Star Fleet personnel. Many of the individual departments have teaching facilities of their own.

Training in Star Fleet never ends, with classes and instruction carried out anywhere and anytime feasible.

ORIGINS OF THE FEDERATION

The universe belongs to those brave enough to share it in peace.

Harmon Axelrod, President of the Federation Council
Stardate 0/8801.07

The United Federation of Planets is the largest economic, political, and social organization in recorded history. Sphere-shaped and with a diameter of over 180 parsecs, it spans more than half the known spiral of the Milky Way galaxy. The Federation currently maintains over 500 member worlds, supported by a fully developed bureaucratic infrastructure and defended by the most powerful collection of starships ever to span the stars.

More importantly, the United Federation of Planets represents the galaxy's most successful attempt to protect the individual freedoms and rights of sentient beings, regardless of their biological origin or social affiliation. In a universe where cultures often dedicate themselves to domination and ruthless expansionism, the Federation advances the knowledge and economic and social progress of every member world. In addition, it upholds the right of individual worlds to govern themselves as each sees fit.

The United Federation of Planets is the product of the combined efforts of hundreds of statesmen and politicians, soldiers and diplomats, and Humans and Humanoids originating from five highly distinct civilizations. They all shared a common dream: given the opportunity, sentient creatures among the stars can exist and prosper in mutual harmony and peace. Having overcome the threat of cultural extinction (often by only a narrow margin of safety), these five cultures shared the profound desire to seek out others like themselves with whom to share the universe.

Following a series of almost disastrous global wars in their 20th century, Terrans began to migrate to the neighboring worlds of their own system and then to the nearest star system. The labors of these early explorers were rewarded in the year 2042, with the discovery of the culturally and scientifically advanced civilization of Alpha Centauri. Cultural exchanges resulted in peace accords, which were largely possible due to the surprisingly similar physical characteristics of the two races.

Combining the Alpha Centauran Zephram Cochrane's principles of spacial warp displacement with Human engineering ingenuity resulted in many early colonization efforts, bringing the two races even closer together. A chance encounter with Vulcans in the year 2065 might easily have ended in unnecessary hostility were it not for the quick thinking and restraint shown by both sides. Their reactions are surprising, considering the Vulcans were not only distinctly alien in their physical appearance, but also alien in their emotional (or non-emotional) makeup as well.

Not all unexpected contacts ended so pleasantly. Between 2070 and 2085, these three starfaring races were forced to deal with the last vestiges of the Vegan Tyranny. The presence of a common foe united the three powers and planted the seeds of the Federation. Despite the threat of this mysterious enemy, the twelve-year period between 2075 and 2087 has often been called Terra's Golden Age. During this period, contact with the Tellarites ended in peaceful cooperation and mutual benefit. Also, the first wave of Human and Human-Centauran colonial efforts began to bear fruit. It was a time when the vast richness of the Orion Homeworlds was discovered and when the existence of Romulan and Klingon savagery was yet unimagined.

Toward the end of the century, these races made contact with the Andorian civilization, which would later become a founding member of the Federation. In this instance, the allied races' overt bluffing and aggressive postering helped defuse a potentially hostile situation. The Andorians were a much older race, and their space exploration pre-dated both Alpha Centauran and Human efforts. They had more than sufficient reason to be wary of alien contact, given their previous encounters with the remnants of the Vegan Tyranny. Nevertheless, the advantages of mutual alliance outweighed the dubious gains of hard-to-hold conquests, and the Andorians joined the informal alliance.

Many Terran textbooks credit Humans as being the driving force behind creation of the Federation. This is about as true as saying that the attempts to form such an interstellar body met with positive responses and unparalleled success. Actually, it was the Alpha Centauri statesman Zorafran Stallamaine who first suggested forming a political union of the Five Primary Worlds, as Alpha Centauri, Andor, Tellar, Terra, and Vulcan were then known. Similarly, the first serious discussion of political union, which took place on Alpha Centauri in 2077, ended in disaffection and discord, due primarily to the inability to define the specific goals and objectives of the new, experimental governmental order.

It was the Vulcans who, during the period from 2077 to 2082, worked with fellow delegates to keep the hope of a Federation alive. Their contributions, more than any other, culminated in a second conference on Vulcan in 2082. At this meeting, many of the objections and disagreements that had surfaced on Alpha Centauri five years earlier were overcome by compromise and by applying the principles from the famous Statutes of Alpha III. Nevertheless, so great were the cultural differences between the Five Primary Worlds that an additional five years of effort remained before delegates assembled on the neutral planetoid of Babel. In 2087, they adopted the Articles of Federation and established a lasting governmental body to maintain peace throughout the galaxy.

MEMBERSHIP IN THE FEDERATION

Membership in the United Federation of Planets is open to any sentient species willing to abide by the conditions and obligations described in the Articles of Federation and the statutes constituting Federation law. In practice, whenever such a race displays a sufficiently high degree of cultural advancement and has demonstrated its peaceful intentions, the Federation's Department of Interstellar Relations contacts the candidate. Specific criteria used to gauge a world's suitability for membership can include a high degree of literacy among the planet's inhabitants, scientific progress sufficiently advanced to accept the existence of other sentient beings, application of the sciences to solve cultural problems or disadvantages, the existence of a cultural philosophy that values individual life, and an acceptance of cultural differences within the makeup of the social order. Though there is no single prerequisite for admission to the Federation, the above-mentioned conditions are among the major considerations.

Once a planet is determined to be ready for contact, representatives of the Federation journey to the prospective world and, taking care to avoid unnecessary cultural shock, make their presence known to the local planetary inhabitants. After establishing themselves as peaceful emissaries, the Federation's diplomatic representatives acquaint their counterparts with Federation history, cultural heritage, and political freedoms, and offer to establish friendly relations with them.

If the planet's populace accepts such overtures, there follows a period of cultural exchange between Federation members and the newly contacted world (typically one to three years), allowing each side to learn about the other. Unless otherwise decreed by a special vote of the Federation Assembly, technological and scientific exchanges are kept to a minimum. Following this trial period, the Department of Interstellar Relations makes a final recommendation to a joint session of the Federation Council and Assembly. Those assembled then vote to accept or reject the candidate world's application for membership.

If the new civilization is accepted into the Federation, it receives either full or associate member status within the Federation's governmental system. Full-member worlds are accorded the right to place a representative on the Federation Assembly, thus granting them an equal voice in the drafting and passage of Federation legislation. Full-status members may also join the Federation Security Council and be elected to administrative and legislative positions within the Federation government, including the Federation Council. Full-status members must make regular contributions to the Federation Treasury, the exact amount being determined beforehand by members of the Department of Finance. In addition, full-status members are requested to contribute to financial appropriations voted by the Assembly in times of emergency.

For cultural, political, or philosophical reasons, a member civilization may sometimes object to contributing funds that might, directly or indirectly, be used for military purposes. In such case, that civilization receives associate-member status. Associate-member status is also given automatically to all Federation colonies with populations of over one million inhabitants. In the Federation government, associate members have representatives in the Federation Assembly, but these representatives cannot be elected to the Federation Council. Associate members may vote on issues pertaining to the Assembly in general, and their representatives may hold positions within the Judiciary or on special committees, but they have less influence than full members.

Whether full member or associate member, the newly admitted civilization is subject to and protected by the laws governing the Federation, as determined by the Federation Assembly and ratified by the Federation Council. The society is likewise entitled to Star Fleet protection and any economic and cultural advantages bestowed by membership. Most important, the world maintains the right of self-government, the right to determine its own cultural future, and the right to live in accordance with its own laws and customs, free from external interference or coercion.

Occasionally, a society or culture not advanced enough to qualify for formal admission will require special consideration by the Federation. The most recent case in point is that of Coridan, a planet whose inhabitants suffered greatly from unrestricted mining operations (what some would call depredations) by various Federation members as well as Orion independents. In such cases, the Assembly may vote to grant Protectorate Status to the planet, in effect placing a hands-off sign on the world. Often, this status is applied to newly emerging civilizations under the doctrine of the Prime Directive. The intention is to protect the natural and orderly cultural development of a given world from outside interference or 'contamination'.

Although offering numerous advantages, membership in the United Federation of Planets must be taken seriously. In accepting the advantages of Federation benevolence, member worlds admittedly do so at a price. They cannot develop an interstellar navy, but they may support a local, in-system fleet. Member worlds must adopt established Federation economic standards when dealing with worlds outside their own systems. Not only does this include incorporating standardized weights and measures, specific monetary systems, and customs procedures, but also economic restrictions and sanctions against other worlds. An example is the refusal to permit trade in Orion slaves anywhere within Federation space. Although Star Fleet is pledged never to use coercive force against a Federation member nor to allow aggression between members, member worlds whose internal policies do not agree with those of the majority may be subject to economic and cultural sanctions, whose result might seem oppressive.

For these reasons, many eligible planets within the Federation's sphere of influence choose to remain independent. Similarly, Federation representatives have not attempted to incorporate worlds from the Triangle Zone, even though many of these qualify for membership. The Federation tolerates these independent worlds as long as their government's policies do not conflict with those of the Federation. Commercial and cultural relations are maintained only if the civilization in question respects Federation economic, political, and military interests. Delegations to independent worlds are dispatched periodically to renew ties of friendship, to monitor cultural progress, or to renew offers of formal membership. Under no circumstances will the Federation ever attempt to impose membership forcibly on a government that cannot or will not accept the obligations of membership.

Theoretically, a member world may withdraw from the Federation when that world deems such action to be in its best interests. The first amendment to the Articles of Federation specifically dictates that any alteration of membership status requires a formal request for dissolution of membership and a two-thirds vote of the Federation Assembly.

PLACES TO GO AND THINGS TO DO

The following section is reprinted with permission of the United Federation of Planet's Government Printing Office Document 37945AJ-32, ***Places to Go and Things to Do in the United Federation of Planets.***

If nothing else, the United Federation of Planets is an exciting place in which to live. Its hundreds of inhabited worlds and dozens of major tourist and amusement centers offer visitors myriad exciting possibilities. The Federation boasts enough sights and delights, be they natural or manufactured, real or imaginary, to satisfy any special interest or particular desire. Indeed, anyone can find what they are looking for in the UFP, as long as they do not mind the travel time! The followng is only a brief list of some of the more popular attractions the Federation has to offer.

QUADRANT ONE

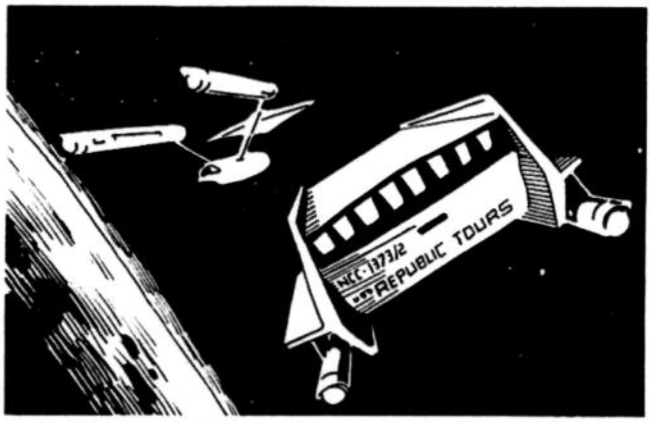
Quadrant One encompasses the original boundaries of the Federation as established in 0/8706, containing the five original member civilizations of the UFP: Alpha Centauri, Andor, Tellar, Terra, and Vulcan. This region is one of the richest tourist and recreational centers of the Federation. An estimated seven billion Humanoid and non-Humanoid visitors vacation in this part of the Federation every year.

Small wonder! Beginning with Terra, there is a wide variety of sights and entertainments available. Terra remains one of the most alluring worlds in the entire Federation. Much of the beauty and old-world style that was the hallmark of Terran civilization before the Eugenics War has been completely restored. Aside from its landscapes, Terra boasts Star Fleet Command headquarters in San Francisco, and in Terran orbit are the largest civilian and Star Fleet starship construction centers in the entire UFP. Though security measures prohibit the general public from viewing much of the work conducted by Star Fleet, the *USS Republic*, a decommissioned *Constitution* Class starship, is open to tourists near the New Xanith Orbital Recreation Center. Also in the Sol system is Wrigley's Pleasure Planet, an entire planet devoted to delighting young and old for a modest price.

Moving outward from Terra, the nearest star system, Al Rijil, hosts the planets Alpha Centauri and Proxima Centauri, both major centers of advanced humanoid cultures. After Terra, Alpha Centauri is the largest cultural and scientific center in the Federation, and tourists will discover numerous social and cross-cultural exhibitions and displays reflecting the planet's primary member status. In addition, sports fans will enjoy the exciting sunjammer solar-sail races held between these two worlds each year. Students of history will be inspired by the Cochrane Memorial and the Federation Historical Institute on Alpha Centauri and the Federation Peace Studies Institute on Proxima Centauri. In addition, both worlds are well-known for their huge expanses of unspoiled wilderness, areas rivalling even the famed Benecian outback.

Sports lovers will enjoy the year-round skiing on Andor, which offers some of the best slopes in the quadrant. For those seeking the strange and unusual, visit Alpha Majoris, home of the Melitus cloud creature, or stop at Avalon, which presents visitors with a spectacle of knights in armor and fair damsels in the capitol city of Camelot. For those seeking entertainment on a grander scale, the planet Imagination has hundreds of special theme parks and picturesque preserves recreating dozens of specialized cultures and time frames from across the galaxy.

Lovers of fine wine will want to stop off at Edo, home of some of the galaxy's most prestigious wines and liqueurs. After stocking up there, one can visit the central courts of the Federation judiciary on Alpha III, which also maintains several major firms that practice interstellar law.

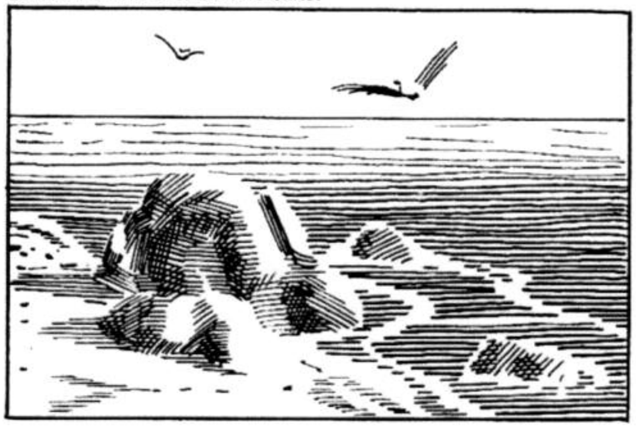


QUADRANT TWO

Though not as populated as its neighbors, this particular Federation quadrant has much to offer the dedicated sightseer. For instance, Altair is famous for the medicinal properties of its native waters. Millions flock to this warm and sunny planet each year to 'take the cure' for whatever ails them. For the bargain hunter, the planet Anchor offers the finest in local pottery and glasswear, while Antares is a trader's delight. With no port-of-call restrictions, literally anything can be found in the thousands of bazaars making up Antarian society. For those interested in the finer things, Ardana's capital city in the clouds possesses some of the finest art and literature found anywhere in the Federation. Those interested in science will marvel at the cybernetic and computer-oriented technologies displayed on Cygnet XIV. Gamblers should enjoy pausing in Castor Fields to play the planet's magnificent horse races, which are conducted with due pomp and ceremony. Investors may want to pause on Demoiselle II, whose craftswomen are renowned for their excellent gems and precious stones. Make it a point to tarry for a moment on Eternity, the poignant and beautiful resting place of those who have died in defense of the Federation. One can also stroll along the wide, sandy beaches on tropical Cait, home of the Federation's only intelligent feline race.

QUADRANT THREE

Seekers of the exotic will not want to miss a chance to visit Aldebaran, famous for its amazing variety of plant life, rare wines, and other delicacies. Ingraham B likewise boasts some of the finest floral species in the known universe, many of which are for sale and are sure to appreciate rapidly in value. For those looking for a change from our modern technological age, step onto Arcturus and into Terra's past, where each day is the 16th century. Similarly, the planet Cyclopus presents visitors with the grandeur of Terra's ancient Rome in the modern age. History buffs will enjoy a visit to the Star Fleet Museum on Memory Alpha. Capella will test a hunter's mettle with its famous power cats, among the most elusive and intelligent of all carnivorous prey. Romantics will want to take their loved ones on a visit to Laura's World at least once in their lifetime. Simple and undisturbed, this entire planet is devoted to lovers. If sandy white beaches are desired, stop by Lakeland. The fashion-conscious will be enraptured with Daran V's fine textiles and silks.



QUADRANT FOUR

Seafood lovers will fall in love with Alpha Proxima II, home of one of the Federation's largest sea-farming concerns and suppliers of rare culinary extravaganzas. In the eyes of many, Deneva is second only to Terra and Alpha Centauri as a cultural capitol. A visit to this warm and friendly planet will be well worth the time spent, considering its vast array of classical and modern arts and entertainments. Make it a point to see the planet Aplithin, home of the Federation's intelligent avians. One tour of this world's lofty eyries and majestic mountain cities will make anyone want to return again and again.

INHABITED WORLDS

Following is an alphabetical registry of inhabited planets within the Federation sphere of influence as of 2/2306. There are currently over 600 inhabited worlds within Federation space, not including worlds currently within disputed areas of control (such as in the Organian Neutral Zone) or colony worlds chartered after 2/2306.01. Information on each inhabited planet includes the following specifications:

Name: The world's proper name.

System: The name of the planetary system in which the world resides.

Location: System's map coordinates.

Race: Predominant racial type [Andorian (Andor), Caitan (Cait), Alpha Centauri (Cent), Cygnian (Cygn), Deltan, Edoan, Human or Humanoid, Mixed, Non-Humanoid (NHum), Tellarite (Tellar), or Vulcan].

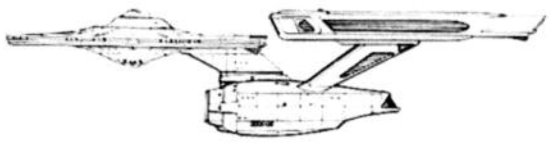
Pop: Estimated population in billions of inhabitants as of 2/2306.01.

Status: Planet's current political status [associate Federation member (AS), full-status member (FS), Federation colony world (Col), independent world (Indep), quarantined world (Quar), or protected world under the Prime Directive (PDir)].

Profile: Major planetary concerns [agriculture (Ag), entertainment (En), cultural (Cl), industry (In), mining (Mn), naval support base for Star Fleet (Nv), shipbuilding (Sh), science (Sc), trade center (Tr), or other special or unknown considerations (X)].

STARSHIP CONSTRUCTION FACILITIES

Within the Federation, there are currently 16 major civilian and military shipyards, accounting for over 95 percent of all starships constructed annually. At present, these yards produce a total of over 4,500 warp-driven vessels each year. The following is a breakdown of average starship construction by vessel type and location.



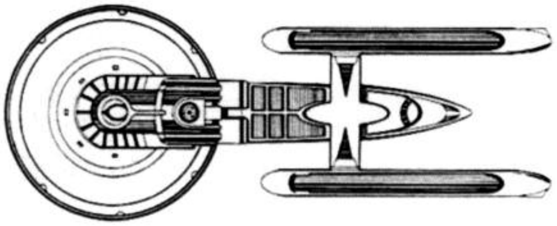
AVERAGE ANNUAL PRODUCTION RATES OF MILITARY AND COMMERCIAL VESSELS

Planetary System	AS	BB	CR	CT	CV	DD	ES	FR	MN	SC	FR	TN	TR	WP	COM
Alpha Centauri	–	–	–	13	–	–	–	–	2	–	–	–	–	40	236
Andor	–	–	14	–	–	–	8	–	–	–	–	–	–	47	122
Arcanis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	275
Cait	–	–	4	–	–	–	30	–	–	–	18	–	7	47	18
Lasur	–	–	–	–	–	–	–	–	–	–	–	–	–	–	124
Lixis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	98
Lochlar	–	–	–	–	–	–	–	–	–	–	–	–	–	–	76
Merak	–	–	–	6	–	–	–	15	–	–	–	4	–	47	4
Morena	–	–	4	6	90	8	24	8	–	4	8	–	6	40	16
Mursa	–	–	–	–	–	–	–	–	–	–	–	–	–	–	48
New Aberdeen	–	–	–	–	–	–	–	–	–	–	–	–	–	–	240
Pallatrine	–	–	–	–	–	–	–	–	–	–	–	–	–	–	110
Proxima Centauri	–	–	–	–	–	–	–	–	–	4	10	–	–	–	–
Salazaar	7	–	34	19	90	63	–	9	–	4	–	2	7	47	222
Sol II (Venus)	12	–	14	–	–	–	–	8	–	–	–	–	–	95	–
Sol III (Terra)	–	1	2	–	–	–	–	–	–	–	–	2	–	40	750
Sol IV (Mars)	–	1	6	–	–	13	28	–	–	4	–	–	–	–	28
Sol V (Europa)	–	–	–	–	–	–	–	–	–	4	–	–	6	40	–
Sol VI (Titan)	–	–	–	–	–	–	40	–	–	–	–	–	13	47	–
Tellar	7	–	–	–	–	–	–	–	–	–	18	–	7	47	525
Vulcan	–	–	–	–	–	–	–	–	–	–	–	–	–	20	400
Wall	–	–	–	–	–	–	–	–	–	–	–	–	–	–	184
Annual Totals:	26	2	78	44	180	84	130	40	2	20	54	8	46	557	3476

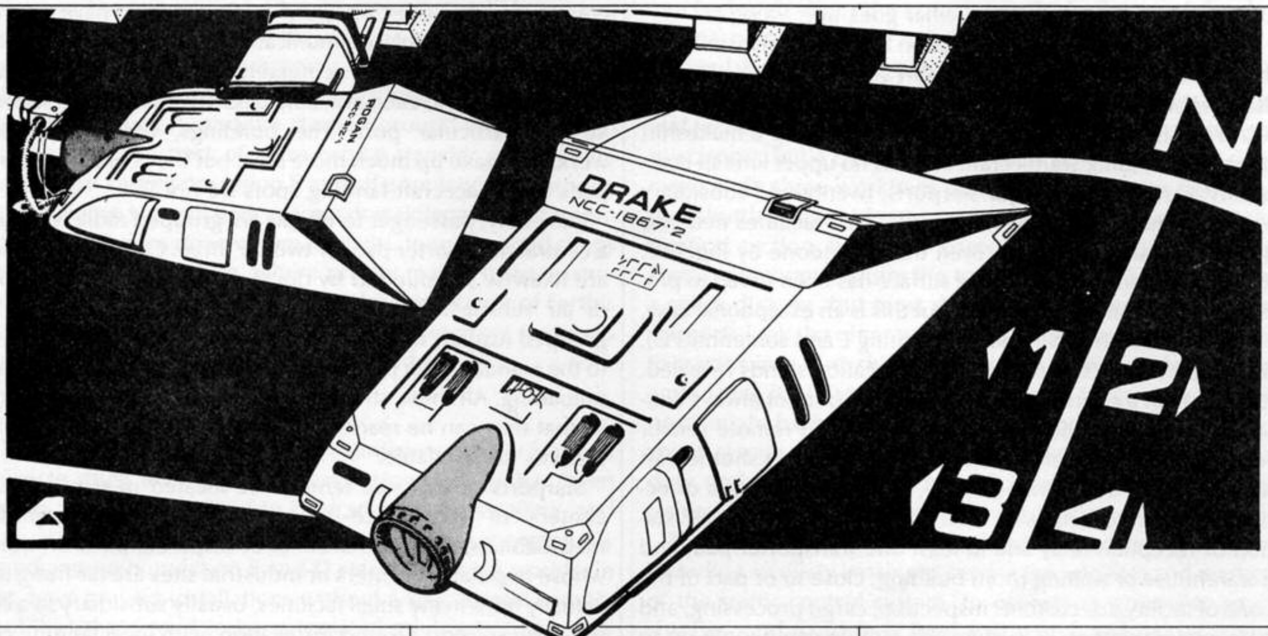
Grand Total: 4747

Abbreviations

AS: Assault Ships
BB: *Excelsior* Class Battleships (projected construction levels)
CR: Cruisers
CT: Cutters
CV: Corvettes
DD: Destroyers
ES: Escort Ships
FR: Frigates
MN: Monitors (sub-light craft)
SC: Scouts
FR: Cargo Carriers (all types used by Star Fleet)
TN: Tenders
TR: Personnel transports (all types used by Star Fleet)
WP: Warp Shuttles and Courier ships
COM: Civilian and commercial vessels



Spaceports In The Star Trek Universe



Say the word "starport" and most people immediately picture a level landing field with a control tower, launching pads and gantries, and needle-nosed ships poised to return to space. For most science-fiction role-playing games, this image, or some variation, is roughly accurate enough to serve as a model for picturing the scene.

Not so in the *Star Trek* universe, where most ships are too immense to land on any planetary body and the transporter is a major mover of people and cargo. The standard image of a starport as a kind of advanced airport in this context becomes as quaint as animal-drawn transport. No needle-nosed ships here.

But starports are still a necessity for transporting goods and passengers to and from space, serving as repair yards, parking areas, and as centers for all types of administrative work: customs, traffic control, civilian business, and military organizations. Starports exist in the *Star Trek* universe; they just don't look like what you might expect.

THE BASIC IDEA

Star Trek starports usually have three components: ground installations, spaceborne facilities, and traffic-control networks. All three are nonunitary (i.e., none are found exclusively in one place or even in one piece). They are very flexible as a result, capable of being tailored to the requirements of individual worlds and systems. They also tend to be extremely idiosyncratic, since no two star systems have exactly the same resources, population, or traffic.

The many worlds of the Federation are truly isolated but for their starports, where the denizens of the surface can interface with the bounty of a star-spanning civilization.

In general, ground installations reflect only the distribution of people and resources on a planet with need for an access to space. Orbital installations are the better indicator of how much traffic a world is willing and able to service and handle. Access is determined by the traffic-control system which steers faster-than-light starships to and from a starport around other planets, navigational hazards, and each other. Primitive facilities can dispense with one or more components, but any worthwhile populated world will have all three.

Because each of the three components can vary so much from system to system, useful groupings are difficult to make for purposes of classification. By far the greatest determinant of a starport's capabilities is the population rating of the particular world (A through E), though enough variation exists within each rating to allow classifying such starports as *small*, *medium*, or *large*. Even this system is arbitrary and leaves gaps; Delta Vega, for instance, an uninhabited automated mining world has port facilities large enough to receive, load, and dispatch the giant robotic freighters which call once every 20 years. Yet Gideon, a heavily populated world, refuses all contact with any spacefaring people and has no starport facilities at all.

By and large, 15 classes of starports define their capabilities fairly well. Since each world's requirements for each of the components varies so greatly, some description of each component's composition capabilities will help to envision how a *Star Trek* starport does its job.

GROUND INSTALLATIONS

Since *Star Trek* shuttlecraft and landing-capable starships are equipped with vertical lift engines (either antigravs or reaction motors), they can land in any clear place slightly larger than their own platforms. The matter transporter, of course, operating from orbit, needs even less space. Ground installations serve, therefore, a predominantly administrative and convenient function by centralizing landing and beam-down locations close to populated or industrial areas, where local authorities can keep track of what lands and what goes up.

The simplest possible construction for a ground installation that could be called part of a starport at all would be a cleared outdoor area, with some kind of communications apparatus nearby to fix transporter coordinates or provide a makeshift beacon for landing shuttlecraft. There is no upper limit to complexity; Earth has five major starports, twenty-odd subsidiary ports, and numerous Star Fleet and private facilities tied into its overall starport scheme. Even this is outdone by Rigel IV, the trading planet, whose entire surface has been paved to provide landing and parking space, but this is an exceptional case.

On worlds with Low Population (rating E and sometimes D), the simplest form of a full ground installation stands revealed. It consists of a control center (sometimes but not always contained in a tower), possessing both local and remote sensor readouts and a central communications system; a shuttlecraft landing target and parking space, usually including a directional beacon to help with final approach; a transporter station or reception relay and at least one transporter pad; and a warehouse or waiting room building, close to or part of the control facility, for customs inspection, cargo processing, and passenger reception. A system this simple can handle up to 150 passengers each way, and between 1000 and 5000 Standard Cargo Units (SCU) a day, in general usage. In theory.

In practice, small population worlds usually depend heavily on one kind of export cargo, and their port facilities are built accordingly. Such installations will be found close to the mines, mills, or fields, with automated handling machinery for the movement of bulk cargoes, such as pipes, conveyor belts, cargo containers, automated trucks, etc. Loading capacity may be closer to 10,000 SCU per day or more, with a comparable offloading ability for colonies or other nonself-supporting worlds. Starports on a main trade route or with considerable traffic to multiple markets, may have normal storage or warehousing space since they can rely on a constant flow of ships to bear products away, but more limited, isolated or "singe-purchaser" worlds (owned by megacorporations or combines) may have almost nothing but storage space on the ground for the export products waiting for a single massive cargo vessel.

Mid-sized ground facilities (population C and B) tend to be larger, more extensive, and less specialized. The flow of cargo and passengers is heavier, but more diversified. Warehousing, for upbound and downbound goods, will be much more extensive and decentralized. Personnel facilities are greatly enhanced, and include hotels, ground and air transportation, perhaps some medical facilities, and an extensive public-access information and communications system. Starports of this size do geometrically more information transfers than smaller ports, including newsfax, computer data, interplanetary mail, and entertainment media.

The actual machinery for receiving and dispatching people and cargo to and from space, however, may not be tremendously greater than that of simpler starports. It's a busy port that can use, for instance, four personnel transporters and 10 cargo transporters, plus landing and parking space for 20 or so shuttlecraft, as many population C starports do. What makes the difference is all the distribution machinery to keep people and goods flowing through the facilities, meaning more conveyors, vehicles, storage, and workers per pad. Where a population D or E port might have only one building and a couple of warehouses, a population C port could have separate structures for control, communications and computers, ground and air transportation, emergency control, ship repair, maintenance, and each available passenger and cargo services at this particular port. The buildings, roads, rails, and workspace take up much more area, but the actual transporter pads and spacecraft landing spots do not.

Generally, passenger terminals are grouped radially around a central transporter pad, or two, or three. Cargo transporters are likewise surrounded by docks for the loading of ground or air vehicles. Shuttlecraft and starship parking sites are grouped (usually linearly, but there are many variations) near to the manual cargo processing centers for ease of loading and unloading. All these structures are arranged for convenience so that they can be reached by whatever local transportation systems are available.

Starports of this size tend to be located near population centers of some size—cities, cluster-cities, complexes, megahabitats, or industrial zones or strips. Starports on worlds whose population centers or industrial sites are far-flung may actually have many small facilities, usually subsidiary to a central main starport ground installation, with local landing control slaved to the main facility's central control. As population increases, so do the size and often the number of these subsidiary facilities; private fields and docks may even subscribe into the system.

Another feature of population C and B starports is the shifting of some starport functions "upstream" to orbital stations and complexes. One of the first things to go up is customs and import control, which tends to give cause for the building of orbital warehousing, public and private, for downshipping and transfer to other ships, and the construction of orbital hotels and administrative complexes. Upbound passengers and cargo are still cleared on the ground. Only much larger ports, which can afford the personnel and sensors to control all transporter and shuttlecraft traffic, clear outbound people and cargo in orbit, as well as on the ground.

Ground-based loading and unloading never do quite disappear from any starport, no matter how large. Smaller ports see a disproportionate number of landing-capable starships, since they are the most economical way of landing and picking up cargoes from such worlds, but larger ports see larger ships, and the great time advantages of the transporter make themselves felt. Smaller ships, though their share of total tonnage decreases even faster than their actual tonnage carried, never do desert the larger markets and larger ports. Federation-wide, some 55 percent of all cargo and passenger landings (nearly all the passenger traffic) are by transporter. Shuttlecraft handle another 25 percent, and the remainder is borne by landing-capable starships. Thus, customs and immigration offices remain sited on ground installations even though a growing proportion of their work takes place in space.

The largest starports, those serving worlds of population rating A, are even larger and more dispersed. Past a particular size, after all, the advantages gained by a larger single installation are overbalanced by the costs of construction and transportation, so many more starport ground facilities are provided to many more locations. In fact, ground locations served by the same spaceborne and traffic-control systems may not even be on the same planet; Earth, for instance, counts Luna's numerous landing sites as ground installations, and even the LaGrange habitats, though they are in stable orbits, are "ground" to Earth's starport system.

Even more of a starport's functions take place in space at population rating A, and the starport ground facilities begin to take on the aspect of mere orbital transfer stations and workshops. Large population B and all population A starports begin to move some of their spacecraft maintenance and manufacturing functions downstream to plants, foundries, and shops on the planetary surface, where gravity makes heavy manufacturing tasks easier. This explains the appearance of Earth's New Jersey spaceport, where luxurious passenger terminals are nestled cheek-by-jowl with heavy industry.

SPACEBORNE INSTALLATIONS

The bulk of starship parking and maintenance in the *Star Trek* universe must take place in space. However, as has been shown, smaller ports tend to have smaller ships calling, and truly comprehensive spaceborne facilities are not commonly found among population E and D starports. Some worlds, in fact, have ground installations without a spaceborne component, but these tend to be automated mining stations, very young colonies, or other pop-X planets. A world with any appreciable traffic at all needs manned orbital stations and attached repair and rescue facilities to support incoming vessels.

Rescue vehicles, especially if they are war-driven, are extremely valuable spaceborne assets, particularly to the reputation of the world from whose starport they hail. They are money-losers more often than not, but spacers feel a great deal more comfortable knowing the port they are bound for (or passing near to) has a ship on call to come to their aid should they lose warp capability. Rescue craft, alas, are expensive, and warp-capable ones are rarely found at any starport with a population rating of E.

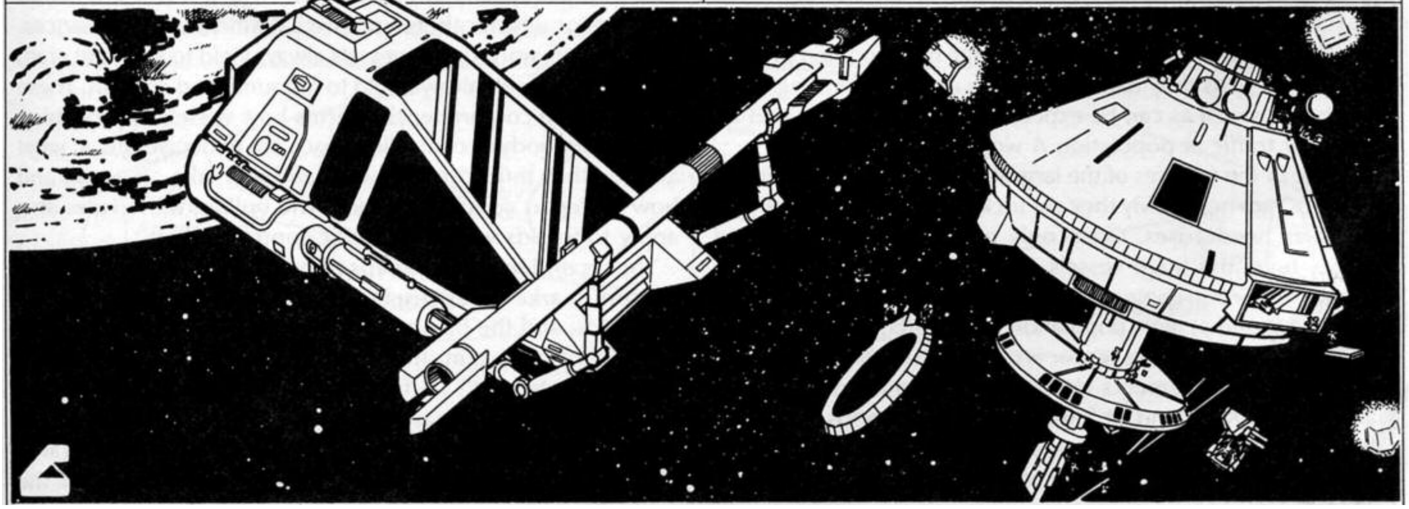
Population rating E starports have bare-bones spaceborne facilities, usually just a single manned space station to monitor communications and the traffic-control net. It may not even have its own transporter system or shuttlecraft, but most have at least one spacecraft available for surface-to-space and in-space service, and often times they may have more. The personnel of such stations usually do double-duty, operating the station and control net and coincidentally, when called upon, doing repair and maintenance work on starships that call. Work can be tough when the crunch comes, but most of the time station personnel have it pretty easy.

Population D starports have noticeably larger spaceborne contingents, particularly in the number of service, transport, and rescue vehicles. Actual numbers vary widely from starport to starport, but a typical population D port might have six or more craft: three workbees doing double duty as light tugs, two shuttles, and at least one rescue craft with an extensive medical section, habitually known as "the ambulance." Star Fleet regulations require life to be saved first in the event of a space disaster, but most starport authorities at the smaller starports look the other way if their ambulance has been used to tractor in a hurt ship and its intact cargo—so long as the ambulance itself isn't harmed, of course. Large population D ports might have a second craft used entirely for deep-space vessel rescue and cargo salvage. This tends to be very popular duty, and crews tend to be picked carefully; they are elite, well trained, and usually scrupulously honest.

Population C starports have complete spaceborne systems, including auxiliary vessels to service the satellites and markers of the traffic-control system, to operate as ground-to-space shuttles, and to form at least two search-and-rescue teams, capable of intercepting stricken ships, handling on-board emergencies, and evacuating quickly. Tugs capable of handling Class X size or larger vessels are common.

Fixed orbital facilities, likewise, are much larger and complete, and more heavily populated, with some or all of the complement living in space. With a larger proportion of pure-space vessels now arriving, orbital customs and cargo inspections become regular, as well as close-in traffic control to keep landings, takeoffs, and orbital positions straight among all vessels. Starports of this size also tend to have civilian or private interests leasing office space in the existing station, or building their own. It is not unusual for multiple manned stations to be used to keep traffic straight and accommodate private business at population C worlds, with these stations being spaced evenly in low parking orbit or placed high in synchronous orbits at the outermost limits of transporter range.

Worlds of population rating B have starports with spaceborne assets which are little short of being entire orbiting cities. They



have multiple manned stations, extensive repair yards with expandable "flydocks" for working on starships or constructing them anew from components, fleets of tugs, workbees, rescue and salvage craft, immense administrative offices, living quarters, passenger accommodations, and even warehouses in several orbits, on nearby moons, or in orbit about them. Some even have installations in orbit about other worlds in the same planetary system or its asteroid belts, either as part of the outlying traffic-control network or servicing ground facilities on other worlds. Space-based manufacturing is quite common at this population rating, and entire industries receive raw materials, process them, and ship down finished goods to the planet below, or they ship them outsystem again, without an ounce of product ever touching the ground.

The administrative work that goes into keeping such a complex functioning is mammoth. Simply keeping track of the hundreds of ships, shuttles, orbital structures, and satellites in near-planet space absorbs an enormous amount of sentient and computer time. Having multiple landing and beam-down points complicates things further, as well as the much greater proportion of slower-than-light craft, which claim the right-of-way from warp-driven ships. The cost of maintaining this vigilance is also mammoth, but the port authority of most worlds this size deals with it by taxing not just private industry, but all users and occupiers of near-planetary space who fall within its jurisdiction or use its services. Compared to smaller starports, which bend over backward to attract more vessels and trade, larger starports charge a premium for their use. There is more than enough to draw trade, and money is being made on-world and in space because of that trade.

Population A worlds have starports not merely larger and more extensive than population B starports, but of an entirely different order. Their spaceborne facilities are found orbiting the main world of the system, any moons it may have, and most of the other worlds in the system. It services ground facilities throughout the system, as well as the enormous and elaborate traffic-control network needed to tie them together. Their search-and-rescue vessels, and most of their tugs, are based farther out-system where they are closer to where they are needed. Medical complexes, space hospitals really, are likewise located far out from the starport's center, as are repair yards, construction yards, orbital factories, and even living complexes.

Nearly all administrative features of a population A starport are now in space, usually in near-planet orbits and branched out all over the system. Spaceborne assets of this size are capable of handling the traffic to a huge metropolitan ground port as easily as they handle a private one-ship landing field, or about as well as can be expected, given the heavy and increasing traffic at population A worlds.

Some of the features of the largest starport types are unique, but most are not; slowly they are trickling down to smaller starports as need arises. Once only population A worlds had lander-tugs, the huge vessels capable of carrying immense loads like starship engines to and from a planetary surface. Now they are found at most population B starports, particularly the larger ones. Large-scale sensor arrays, specialized rescue craft, and other improvements introduced at population A worlds are now being found at lower-population worlds and even becoming common. This includes the emplacement of more spacecraft construction, workshops, and factories on the ground. The day is probably not far off when every population B world, as every population A starport now boasts, will have a permanent Star Fleet presence in the form of an administrative office and a permanent rotating contingent of vessels.

Until recently, population A starports were also known for being even thicker with "sky clutter" than B starports, but the construction of Space Dock in low Earth orbit may reverse that trend. In place of many scattered constructs in similar orbits, a single megalithic spaceborne structure offers a large savings in communications and transportation difficulties while controlling runaway growth. It has long been possible to put all spaceborne assets into one gigantic structure, but the costs always seemed to overwhelm the need. No longer. A single structure like Space Dock may be expanded to accommodate new growth without impairing its continuing function. There need be only one structure for every world in a starport system to contain all spaceborne assets needed for that world and its immediate space, with the exception of outlying search-and-rescue facilities. The savings in traffic-control problems alone will probably cause this advance to trickle down to smaller starports in time as well.

Space Dock was built to Star Fleet specifications, and apparently only to fulfill their needs. Whether civilian space operations move into Space Dock as well, or another Space Dock is built purely for private interests, remains to be seen.

TRAFFIC CONTROL

Ships in the *Star Trek* universe are *fast*. They can accelerate from orbital to light velocities in minutes, or seconds. They aren't affected by gravity wells or (to judge by the last movie) immersion in planetary atmospheres. They have no problems operating, or going anywhere, at light speed, even perilously close to planets and each other. This is why, when you have 10 or 200 of them in close proximity to a world, it becomes *very* important to know *exactly* where each of them is and what they are doing, and better still, to be able to direct them in a sensible, non-lethal pattern, so that they can all get where they're going without causing what 20th century rocketmen called "snakebite"—an accident.

Spaceborne starport assets are intended to help sort out the mess, but they would be useless if not for two things. The first are the Federation-mandated, Star Fleet-enforced Rules of the Road, which specify which vehicles will yield or alter their courses for which others under what kind of circumstances. For instance, warp-driven vessels always yield to sub-light craft. Outbound vessels always yield to inbound, and so forth. These rules state in comprehensive terms how vessels approaching a planetary body in controlled space are to decelerate, at what altitude they must orbit, how to land and take off again, and how to depart controlled space. The bulk of these rules also apply to worlds without a traffic-control system.

The second thing that keeps things straight is the system of sensors, marker satellites, buoys, communications relays and protocols, and the beings behind them, which is a starport's traffic-control system. In its simplest form, as shown in the diagram, a starport's traffic-control zone is divided into three parts. The Outer Zone is the official limit to the system's control, where all spacecraft must follow the directions of Traffic Control. In the Outer Zone are two travel corridors: the

Approach Corridor and the Departure Corridor, which would look like truncated elliptical cones if they were visible. The third control zone is the Inner Zone, roughly from the planetary surface to 20 diameters out, where warp speeds are not allowed and where spacecraft are achieving, departing, or changing orbits. This diagram is greatly simplified; if there were other planetary objects in this star system, they would also have approach and departure corridors, plus travel corridors between each. The traffic-control solution can be terribly complicated in a huge hurry.

On the other hand, the basic principles of in-system navigation for all types of vessels may be summarized briefly as follows:

1. All approaching ships under warp drive must approach a planet from the trailing direction and within 10 standard degrees of the orbital plane once they are within the outer control zone markers.
2. All departing ships under warp drive must depart in the direction of planetary motion within 10 standard degrees of the orbital plane until they reach the outer control zone markers.
3. Ships may not be under warp drive within 20 diameters of the destination world, not have a speed greater than 0.1c within five diameters of the destination world, unless directed to go slower by Traffic Control.
4. Faster vessels must yield to slower; warp-drive vessels must yield to sub-light; powered vessels must yield to unpowered; manned vessels must yield to robotic.
5. Traffic Control is always right.

Traffic-control systems and their assets vary at least as widely as the other two components of a starport, and often more so, due to the wider variety of problems moving planets, asteroids, stray comets, and the types of ships in system. They can be relatively simple or mind-bogglingly complex. Not all systems share the same precise features, but all have some basics in common.

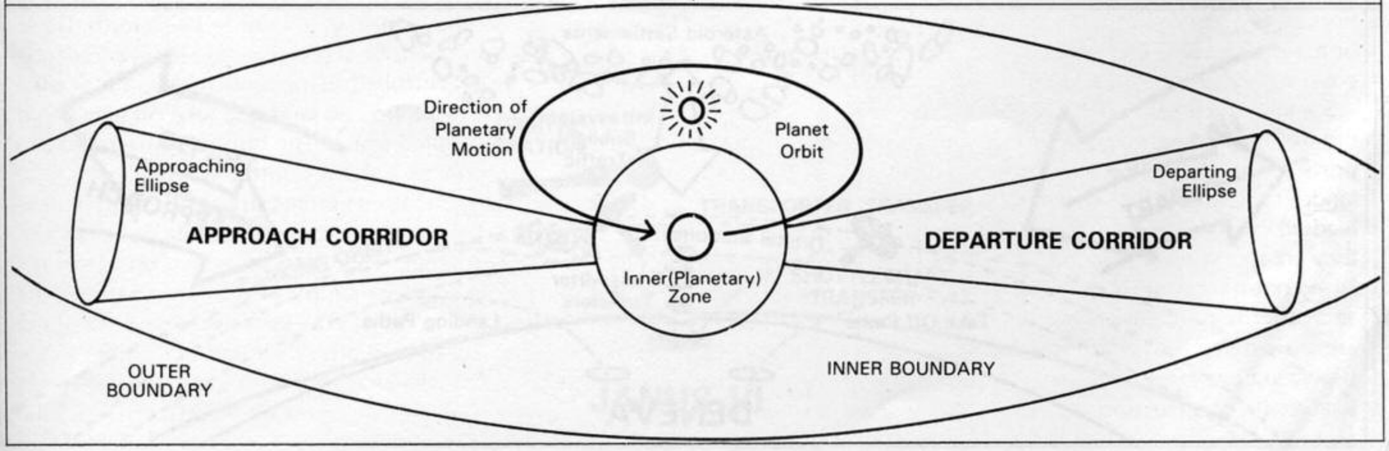
There are three parts to any traffic-control system: Approach Control, Departure Control, and Planetary Control. At smaller starports many personnel double up on some jobs; at larger ones Planetary Control is further divided into a Landing Control and a Takeoff Control section. Approach Control's job is to gather all incoming vessels, establish contact with them by sub-space radio, guide them into the approach corridor, and cause them to arrive, in single order, and at sub-light speeds, at the 20-diameter limit where Planetary Control takes over. Departure Control sequences departing spacecraft leaving Planetary Control's jurisdiction into the departure corridors, or other interplanetary transfer corridor, and guides them in an orderly manner to the edge of the system closest to their intended destination. Planetary Control establishes orbits for all incoming craft, designates orbit changes, landings, and takeoffs from the planetary body, and regulates departures from orbit to other planetary destinations or out-systems. Though all three of these divisions make up Traffic Control, where a star system has multiple system destinations, Traffic Control handles guidance between local Planetary Control authorities.

Sometimes smaller starports, with limited traffic, have only an Approach and Departure Control and a Planetary Control; the very smallest have only a Traffic Control. Larger starports have more subdivisions, including Search-and-Rescue, Harbormaster (space-going "traffic cops"), Salvage, Medical, even a Mobile Repair Control. Each has specific authority over a part of a vast network of ships and unmanned buoys that, if it functions well, never gets noticed at all.

How much each traffic-control system can vary from another is illustrated with these three schematic diagrams of selected starports and their traffic flow.

Janus VI is a low-traffic world, and its traffic-control system is very simple. It is a mining world, the only destination in its star system; it has next to no sub-light traffic with which to contend. Its only concern is ore freighters, manned and robotic, and the occasional supply and mail ship. There is only one main surface installation handling all shuttle and transporter traffic from orbit to ground and back. Parking orbits around Janus VI are unusual, being either very high (7000 to 15,000 kilometers) to give longer loading times for transporter-equipped freighters, or very low (500 kilometers or less) to accommodate loading by shuttlecraft.

Deneva is a mid-population world with moderate traffic to its one inhabited planet and the mining settlements in its asteroid belts; there is a moderate amount of intra-system traffic between these settlements and Deneva itself. Traffic is more variegated; besides the usual freighters there are numerous passenger and research vessels, plus a steady influx of Star Fleet ships, for Deneva is an important scientific outpost. Contrary to popular belief, Star Fleet must follow the same orders from Traffic Control that regular traffic does, but they have the authority, in emergencies, to maneuver independently even in high-traffic areas, relying on their superior sensors and highly



trained crews. Deneva is a good representative of the majority of starports in the *Star Trek* universe: Note that in the diagram the multiple destinations in the asteroid belts have been abstracted into one out-system destination.

Now comes Earth, the Grand Guignol of traffic-control systems. The starport at Earth is one of three starport complexes; there are comparable ones at Mercury and Mars, with subsidiary operations at Venus, Jupiter, Saturn, and the asteroid belts. All of these operations have ground and spaceborne facilities subordinated to Earth Control, and all receive traffic from out-system as well as each other. Near Earth there is Space Dock, of course, plus all the LaGrange habitats, the Lunar complexes, all five major ground ports and 20-odd subsidiary public ground installations, and a like number of private fields, *plus* the Star Fleet complexes, orbital and ground-based, incorporated into the Earth starport system, for the sake of simplification. Multiple ground destinations at the other worlds in Sol System are the rule, not the exception. The situation only gets worse when one considers that all these destinations are in motion, and that twice a month approach and departure corridors to Earth have to be diverted due to the presence of Luna and *its* approach and departure corridors sweeping through. And Star Fleet, which has authority to override Traffic Control even here, maintains large training areas in the asteroid belts and out-system where traffic is not permitted. This diagram is, of necessity, greatly simplified for clarity.

STARPORT OPERATION: AN EXAMPLE

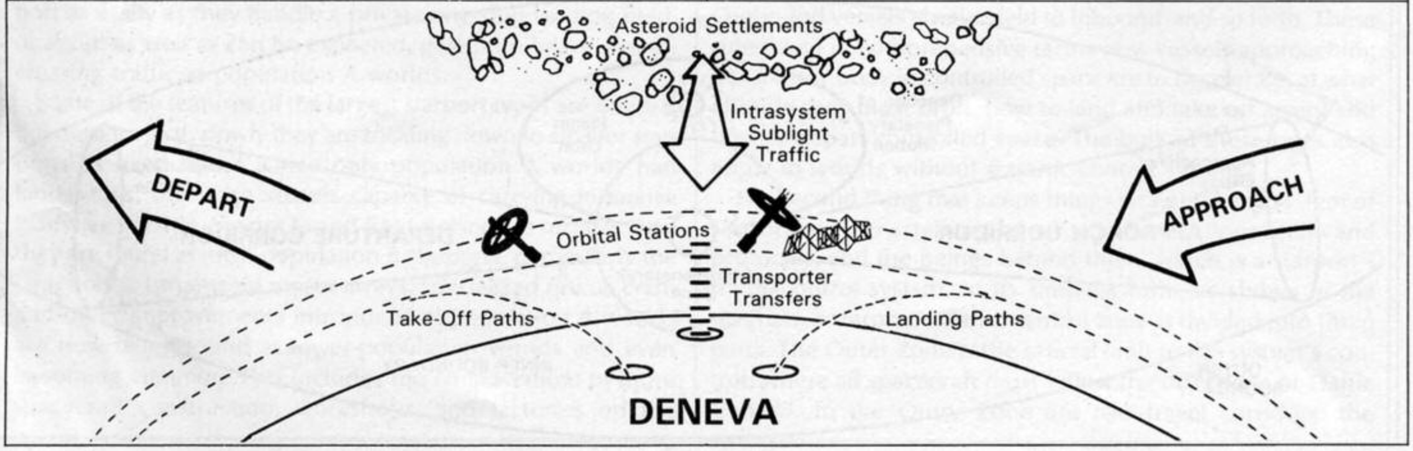
All the data on *Star Trek* starports that could be given would not be sufficient to get a feel for how they handle individual ships. So, for the purpose of illustration, follow the approach, landing, and departure of the *Handley*, a Class V merchant vessel, at a typical population C starport.

Upon detecting the star system's navigation beacon, the captain or communications officer contacts Traffic Control and informs them of the ship's approach. Traffic Control then assigns the ship a course which will bring it to the outer system boundary markers within the ellipse of the approach corridor. Should a vessel fail to alert Traffic Control, system sensors will detect the ship as it crosses the outer zone boundary, and Traffic Control will immediately hail that vessel on all the usual channels. Failure to contact Traffic Control before reaching the outer boundary is not an offense, but since it greatly simplifies the approach problem (and gives the ship a time reference for the coordination of ship's time with the intended landing site), it is greatly recommended. Failure to heed Traffic Control once the outer markers are crossed is an offense against the Navigation Act, and can result in suspension of licenses for pilot and master.

The *Handley* is directed to steer 135mark10 to bring it to the approach corridor for the one planet in the system it wants to reach. Star systems with multiple inhabited worlds have more than one pair of corridors, which Traffic Control is careful to keep from overlapping; this usually involves moving one or the other every standard month or so, or, in more congested systems, every week. (At Earth the corridors shift every six hours.) The course the *Handley* has been given will not take it directly to its destination world, of course, but it will take it to where Approach Control expects to gather it in.

Upon crossing the outer boundary marker the *Handley* alerts Approach Control and gets a new course and speed for the destination planet, in this case 223mark4, warp 2. At this speed (one au a minute), the *Handley* will spend nearly half an hour on approach. More crowded systems place their outer markers farther out and vary approach speeds more widely than smaller starports. Traffic and sun-weather advisories, available on a reference channel and often running continuously through a ship's computer, inform incoming vessels of peculiarities or hazards to watch for on the approach. Active suns with prominences or violent solar winds sometimes wipe out distant-reception functions of both the traffic-control new and incoming spacecraft, and if that happens, a backup system of short-range, powerful beacon satellites is available to guide craft down a "string" in the middle of the approach path to within the planetary magnetosphere. This trip, the weather is fine, and the *Handley* joins several other ships in a converging cone, each ship's speed matched to bring them all to the cone's apex in a uniformly spaced sequence. The *Handley* is informed of one possible problem: Three ships ahead of it is a Class XVIII robotic freighter, which may require additional time to bring into orbit, perhaps as much as half an hour's delay. A starport tug is also working close to the approach lane today, removing a previously undetected small asteroid before its orbit intersects the approach path, and a sub-light shuttle is inbound from an out-system settlement, making an orbital approach to the destination world from outside the warp-speed approach corridor. The captain of the *Handley*, being a cautious sort, instructs the helmsman to look lively when the robotic freighter gets close enough to the shuttle to detect it.

During approach, ships also receive preliminary parking



orbits, invariably circular about the destination world, but at different altitudes, according to size, needs, and capabilities of each ship, and the requirements of local Planetary Control. Most systems put sub-light vessels under warp-driven ships, which are arranged according to size, with the smaller being lower. The highest orbits of all are reserved for very large ships, notably robotic freighters. Practice varies from system to system, however, and often from ship to ship, according to circumstances. Preliminary orbit coordinates generally are good for final approach, but in high-traffic systems it's not unusual for them to be changed once or more before insertion.

At the apex of the cone is the Approach Corridor Inner Boundary Beacon (ACIBB); each vessel, as it encounters it, must call Approach Control and get a final course vector for their parking orbit. Ships may not pass the ACIBB at greater than warp 1, unless directed otherwise by Approach Control. On this trip, the robotic freighter has indeed detected the sub-light shuttle and slowed to just below warp speed, and Approach Control informs the *Handley* that it must do the same to avoid closing the intervals between ships. Most starports prefer a margin of at least five minutes between arrivals for minimal safety.

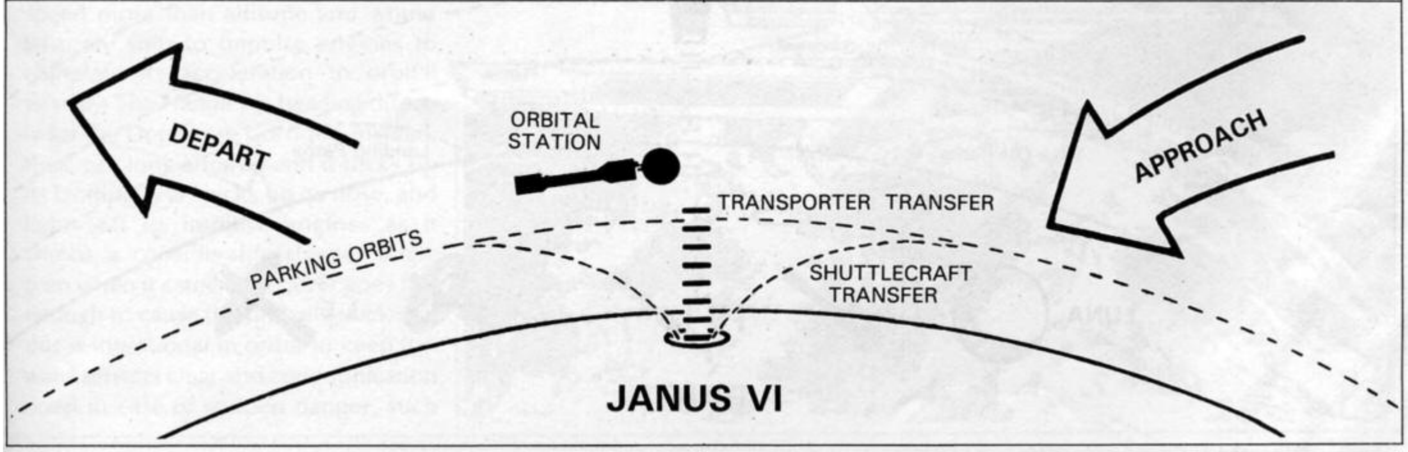
At this point in its journey the *Handley* is close enough to other inbound vessels that it can detect them up to three ships away, fore and aft. Now comes final approach to orbital insertion, one of the true tests of a helmsman's skill. Orbital parameters are given in the form of an altitude, a declination to the local planetary equator, and a precise time to achieve position. Planetary Control gives final clearance for the specified orbit, and then it is up to the individual helmsman to make the slot. Automated piloting programs, if running constantly and coordinated precisely with telemetry relayed from Planetary Control, can achieve very precise orbits, but their flexibility is limited and their use on manned vessels strongly discouraged, though not illegal. The *Handley* announces to Planetary Control that it is going for orbital insertion, and this legally commits the craft to making some kind of orbit; up to this point, for whatever reason, the *Handley* could have announced that it was not going to attempt orbit and requested a departure slot on a priority basis. Once orbital insertion is announced, it cannot be aborted without endangering other craft close to the planet—and gaining an immediate revocation of both master's and pilot's licenses.

The *Handley*'s helmsman is good and careful, and achieves orbit within one second of the assigned time and 300 meters of the assigned position. Both can be corrected easily with ion engines once the main impulse engines are shut down. The *Handley* has officially arrived at its destination planet and may be serviced by all orbital facilities (and charged therefore).

But the *Handley*, having too small a crew and payload to make transporter or shuttlecraft cargo transfer worthwhile, and being landing-capable, files a flight plan with Planetary Control and requests a planetary landing at the starport's ground facilities, submitting at the same time the data Landing Control will need to figure its descent orbit. Traffic is light, and the *Handley* does not need to shift to a lower orbit before it begins atmospheric entry. Landing Control transmits a "landing packet" of data to the *Handley*, including the time of de-orbit, expected time of arrival at the requested facility, and the precise curve the ship must follow. Atmospheric entries are extremely hazardous maneuvers, more so than orbital insertions, and the smallest deviations from a calculated path can destroy a ship or shuttlecraft, and possibly involve other vessels in lower orbits, or themselves landing or taking off, as well as people on the ground below. The precise landing path is a safeguard as well as a guide; deviation from it for any reason, unless sanctioned by Traffic Control, is not permitted.

De-orbit is performed without incident, and the *Handley* descends in a slow arc until it reaches the planetary atmosphere and must begin braking. Most smaller vessels like the *Handley* are not yet equipped with gravitic decelerators which work at high skin temperatures, and which in any case add up to 50 percent to travel time on thick-atmosphere worlds, so the *Handley* rides down in a fireball, relying entirely on atmospheric braking through the hull shape. Most of the fireball rides the shock wave ahead of the ship itself, so the worst of the heat does not penetrate the craft. But it can be a tense time, especially since the fireball cuts off all communications and sensor relays until just minutes before touchdown. A descent like this can take as little as an hour or up to three hours, depending greatly on the altitude of the original parking orbit.

The *Handley*'s fireball fades, and the navigator quickly acquires the landing site's locator beacon to assist the helmsman on final approach. As in orbital insertion, this operation is performed manually; unlike orbital insertion, computerized landing programs are *not* legal. The vagaries of local climate, winds, precipitation and airborne traffic are simply too complex for automated systems, though most ships, the *Handley* being no exception, have automated "prompter" systems, which alert the helmsman to necessary procedures while handling some



minor tasks like waste heat dumping and traffic alert monitoring. The helmsman, with the navigator's assistance, steers the ship onto the glide path provided by the landing beacon.

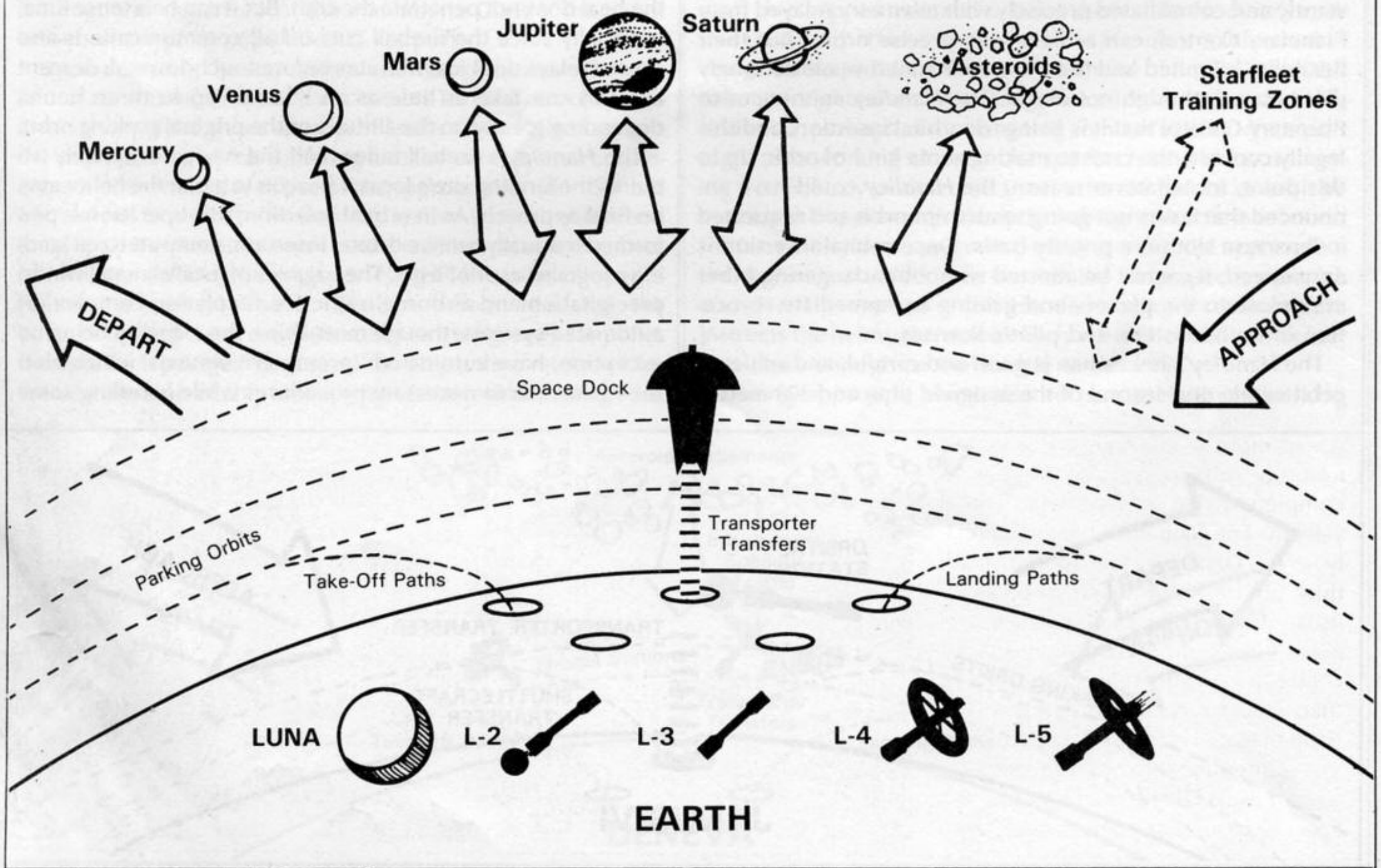
Some starport ground facilities have such advanced short-range ground control systems that they can gather in a landing starship on approach, indicate its landing berth, and have the ship land there. Larger ports have such systems to save time and landing space, since the same landing path may be occupied by three-person shuttlecraft and 50,000-ton freighters at the same time, but this port has a simpler system found in many smaller starports.

As the *Handley* comes below 5000 meters altitude relative, it begins to engage its antigrav vertical lift system—a rather modern innovation for a ship of Class V size, which usually uses reaction thrusters with their lower cost in spite of the attendant heat and blast. The navigator contacts the local Landing Control, informs them that the ship is on final approach, and requests clearance and directions to a berth. Landing Control acknowledges, warns them of a low-level air traffic corridor a kilometer short of the port, and directs them, after touchdown, to take taxi turnoff 7L and follow the markers onto Dock 16.

The port and its landing target now come into visual range, and the *Handley*, already decelerating, aims for the center of the target just past the landing beacon emplacement. Landing gear are extended. A ground facility's landing target is a rectangle of resilient heat-resistant thermocrete, capable of withstanding the blast of landing thrusters and the occasional—very rare—crash landing. A distinctive target shape is typically molded into its surface, and lights outline this shape for night landings. Many pilots make at least a token touchdown on the landing target for the purposes of making a formal log entry at the earliest possible moment of landing, but the *Handley* merely settles to within two meters of the target with a forward speed of just a few kilometers an hour, and immediately glides off the target down the taxiway ahead of it.

Blue arrows and symbols show the various turnoffs to the right and to the left. The *Handley* takes the seventh turnoff, to the left, and follows the arrows to Dock 16, where ground technicians and stevedores wait to help guide the freighter into the slip. This is done. The helmsman lets the ship settle to the ground and lets the lifters fade to nothing. The ship is now landed, and cargo and passenger transfer may now begin.

The *Handley* has no repairs to be performed, and no need for lengthy stays, but after transferring cargo the ship is moved via ground tractor and its own lifters to a berth, where it will await clearance to return to orbit. Larger ports, and those on airless worlds, often have indoor berths for parked vessels, even ones as large as the *Handley*, but this particular world is quite habitable, and all the berths are outdoors. A starship ground berth, on first inspection, is disappointing; it's just a section of hardstand, very strong but hardly impressive, with a number painted or inlaid on it. Connections for long-term power, water, and sewage lines, as well as local communications and datalinks, are all available from the so-called "Christmas tree" at the forward end of each berth. Only ships planning stays of several days or longer make use of all the



conveniences, but while awaiting an orbital takeoff window, a ship will make use of at least the datalink to keep its navigation system updated.

Some ships, particularly larger freighters with containerized cargoes, can file for departure as soon as they hit orbit, knowing precisely how long it will take to offload and load another cargo. Most other vessels wait for their business to be completed, particularly small ships looking for available cargoes on non-standard lines, who do not know if they will lift that day or sometime next week. Dock space is valuable, so as soon as a ship has completed offloading, unless it has another load waiting to come on, it is moved to a parking berth until it can be reloaded, and likely as not, it will be moved back to its parking berth while waiting for orbital clearance.

Takeoff from a starport ground facility resembles landing: A flight plan must be filed, sometimes with a specified orbital position for rendezvous, and Takeoff Control issues a "takeoff packet" with the planned takeoff arc, which again must be followed exactly on pain of violating local and Federation Navigation Acts. The *Handley* wants to simplify its navigation problem of leaving the system. Instead of filing for a parting orbit first and then a departure path, the navigator files for a direct departure—planetary surface to the Departure Corridor and out. This means there is no wait in orbit for a suitable departure time, but it does mean waiting a longer time on the ground while orbital traffic finally clears enough to permit a direct path. The quicker way out of system is *not* the quickest way off-planet.

As the mandated takeoff time approaches, the *Handley* prepares for space by disconnecting itself from the "Christmas tree" and having a ground tractor pull the hovering ship to the takeoff spot. This is another marked rectangle away from the berths and docks, with a clear area before it in the direction vessels will take going into orbit. Smaller ports sometimes have only one target for landing which is also used for takeoffs, but this is very rare; if a port is too small to allow two different spots for landings and takeoffs, it generally allows ships and shuttles to take off from their berths or even their docks. This port, however, has a proper takeoff pad, where the *Handley* is "spotted" on a "toemark" while awaiting final clearance from Ground Control.

When clearance is given, the *Handley* lifts off on its vertical lift system and begins to pick up forward speed. If it were going to orbit, it would need speed more than altitude and would leisurely shift to impulse engines to complete its acceleration to orbital velocity. The *Handley* is heading directly for the Departure Corridor, instead; thus, not long after takeoff it tucks up its landing gear, picks up its nose, and lights off its impulse engines as it climbs a considerably steeper angle than when it came in. It never goes fast enough to cause the fireball effect, and this is intentional in order to keep forward sensors clear and communication open in case of sudden danger, such as an out-of-control landing or an errant craft in low orbit.

The *Handley* encounters no problems as it accelerates out of the atmosphere and along its prescribed course. The navigator informs Planetary Control that the ship is near the end of its programmed trajectory and requests a heading and speed for the Departure Corridor Inner Boundary Beacon (DCIBB). As on approach, the *Handley* gets sun-weather advisories and traffic hazard updates. The weather is clear, and there are no hazards of which to stay clear; at 0.1c the *Handley* is to steer 251mark2 until the DCIBB is acquired.

At the DCIBB several other ships are also gathering, which the *Handley*'s helmsman can acknowledge by the ship's sensors. The navigator informs the system's Departure Control in which direction the *Handley* wishes to proceed once leaving system. Departure Control, which already has this data from the filed flight plan, gives the *Handley* a course that will take it to the point on the departure ellipse closest to its chosen heading. Ships passing the DCIBB begin to radiate outward, following the invisible "walls" of the Departure Corridor as they head out-system. The *Handley*'s course is to be 246mark15, and speed to the outer boundary markers is to be warp 2. The navigator acknowledges, the helmsman adjusts the course, and the *Handley* engages warp drive.

In another half an hour the ship passes the outer markers, and the navigator contacts Departure Control one last time to give the ship's heading. This again helps rescue and recovery forces in the event of disaster, and helps Traffic Control keep track of vessels even after they leave controlled space. It's more a courtesy than a legally mandated necessity, but few ships or captains would omit it.

After setting course and final speed, the *Handley* is out of the starport's control system and free to maneuver at any course and speed it chooses, until it again approaches a new destination world, with its traffic control beacons and starport.

STARPORT GENERATION

Though there are 15 classes of starports, *Star Trek* GMs need not despair at equipping every world with every piece of apparatus and every tendril of Traffic Control. Population rating

is the overwhelming determinant; for further subdivision roll 1D6. A 1 or 2 indicates the starport is *large*; 3 or 4, *medium*; 5 or 6, *small*. Or arbitrarily assign a starport ratio according to a world's traffic—intersystem and intrasystem. A tiny world in a system with other habitable planets or outposts might rate a population E starport, but it could be a *large* one to handle interplanetary shipping.

For quick-roll artists and those with no time to contemplate a star system's innermost needs, the following tables are provided for quick starport generation on any *Star Trek* world.

NUMBER OF GROUND INSTALLATIONS*

PopR E	*PopR D*	*PopR C*	*PopR B*	*PopR A*	*1D10*
1	1	1	1	1	2
2	1	1	1	2	3
3	1	1	1	2	4
4	1	1	1	3	5
5	1	1	2	3	6
6	1	1	2	4	7
7	1	1	2	4	8
8	1	1	2	5	9
9	1	2	3	6	10
0	2	2	3	8	10 + 1D10

*Able to handle a landing-capable starship.

NUMBER OF SPACEBORNE INSTALLATIONS MULTIPLIER*

PopR E	*PopR D*	*PopR C*	*PopR B*	*PopR A*
× 1	× 1	× 2	× 4	× 8

*Total number of all inhabited structures in all orbits at one planet: Reroll Ground Installations number and multiply by the appropriate number.

RELATIVE SIZE OF STARPORTS (1D10)

	PopR E	*PopR D*	*PopR C*	*PopR B*	*PopR A*
Small	1-6	1-5	1-3	1-2	1
Medium	7-9	6-9	4-6	3-7	2-6
Large	0	0	7-0	8-0	7-0

NUMBER OF OTHER STARSHIPS PRESENT*

	PopR E	*PopR D*	*PopR C*	*PopR B*	*PopR A*
Small	1D6-4	1D6-2	1D10	2D10	4D10
Medium	1D6-3	1D6	1D10 + 4	3D10	6D10
Large	1D6-2	1D6 + 2	2D10	4D10	10D10

*On the ground. Use spaceborne multiplier for parking orbits)

NUMBER OF SUB—LIGHT VEHICLES MULTIPLIER*

PopR E	*PopR D*	*PopR C*	*PopR B*	*PopR A*
× 1	× 2	× 3	× 5	× 9

*Intrasystem, intra-atmosphere, and shuttles: Reroll on Starships and multiply by the appropriate number.

AVAILABILITY OF STARPORT ASSETS (PERCENTILES)

	PopR E	*PopR D*	*PopR C*	*PopR B*	*PopR A*
Repair Tender	60%	75%	90%	90%	100%
Rescue Vessel	10%	25%	70%	100%	100%
Tugs	5%	20%	35%	80%	100%
Orbital Shipyards	0%	25%	50%	100%	100%
Star Fleet Ship	2%	5%	10%	40%	100%
Internal Docking	0%	5%	10%	30%	60%

Notes

Reduce percentage by one-third for *small* starports; increase by one-third for *large* starports.

Repair Tenders cannot repair warp engines or damage exceeding 20 percent of original construction values.

Rescue Vessels will save a crew and passengers from a stricken ship but not cargoes, ordinarily.

Tugs can bring crippled vessels into port, cargo and all, or just the cargo, for Cr1 per ton, cash.

Orbital Shipyards can repair any damage to any ship. Roll on availability again if the ship is non-Federation.

Star Fleet Vessel if present can act as repair tender, rescue vessels, and tugs, if asked nicely and if they aren't too busy. But they're *nosy*.

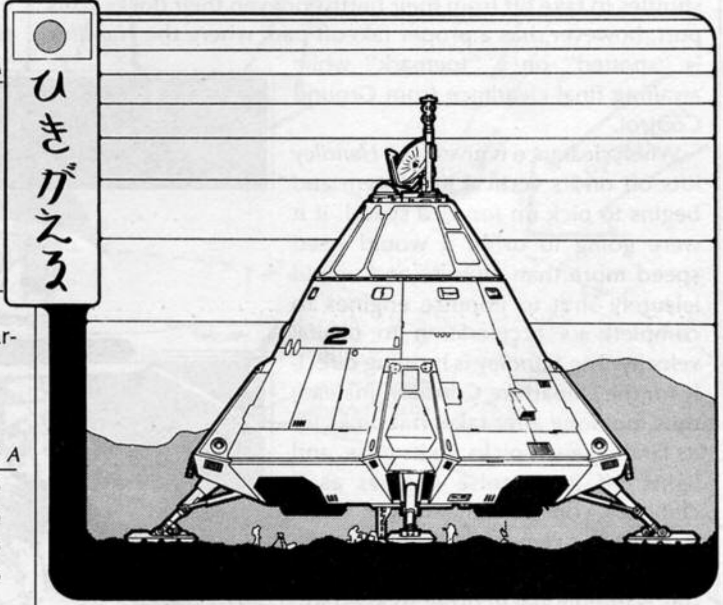
Internal Docking indicates ships and shuttles may dock physically, if desired, with any habitable starport structures in space (GM's option).

Population X starports (1D6)

Worlds with fewer than 100 inhabitants do not have permanent facilities, but they may have a special feature or several if the GM desires.

1. Orbital marker buoy and sub-space radio relay.
2. Unused space station or converted spacecraft, habitable but empty.
3. Ground-based shuttlecraft (seven passengers or five SCU of cargo).
4. Ground-based cargo shuttlecraft (10 passengers or 10 SCU of cargo).
5. Transporter pad available on surface.
6. Strange spacecraft in orbit (Uh oh...).

—Peter R. Rogan



Stardate October 1985

STAR BASES:

The Federation's Handmaiden

by Pete Rogan

Somewhere a solar system is dying of a dread disease. A starship is diverted to a Star Base to pick up the vaccine or serum that will save it. A battle with a raider leaves a frigate with critical damage; it limps back to a Star Base's yards for repair. Back from deep-space patrol a heavy cruiser brings a Star Fleet line officer accused of a serious crime, who must face court-martial before three officers of comparable rank. The only place near where they can be found is a Star Base. Why go on?

For Star Fleet vessels the nearest Star Base is the next best thing to home port. Here a starship can be refurbished, repaired, and its crew given leave and recreation. Here medical supplies and critically important goods and personnel are sorted and directed to their intended destinations. A Star Base is often the most valuable installation the Federation has in a district of space, more vital to its interests than any other single world, no matter how industrialized or friendly.

Star Bases are the backbone of Federation civilization, more important than even Star Fleet, for without Star Bases there would be no Star Fleet. Not only would there be no repair and support facilities, but the very purpose of the Federation would be impossible to accomplish. A Star Base is more than a supply depot, it is a representation of Federation society in microcosm.

Why are There Star Bases?

When the original Federation was formed, every starfaring race had outposts in space; scientific research stations, manufacturing plants, even military bases for patrolling warships. These establishments multiplied rapidly, each race expanding and beginning to hem in all the others with large numbers of bases, stations, and colonies. These pressures compelled the response of a peaceful and cooperating Federation.

The Federation was formed basically as a cooperative interplanetary debating society. It had two aims for the future that distinguished it from every other kind of government before or since. One was the deliberate anticipation of the future, looking forward to a day when the spacefaring races would work and grow together naturally instead of destructively competing. The other was the acceptance of the present and its irreversibility. The races of the Federation would not suddenly forget past animosities, or give up any of their sovereignty and dignity. Under the Federation they would not have to, but they were pledged to make the future a different and better time.

For a better future, space travel and expansion would have to continue but all these activities undertaken by the member races in space would have to eventually be consolidated under one banner. At the same time the Federation could not assume complete control over initiative. The Federation was not to be a force for dominance but for cooperation, it must restrain but not inhibit, oversee but not chaperone, be a leader in space but not the only one.

Out of this concept came the idea for Star Fleet, a force on the military model whose purposes are heuristic; Star Fleet explores space, polices, supplies, and in every way aids the people of the Federation. To complement the mobile elements and anticipate expansion of the Federation idea, Star Bases were planned and built.

Functions of Star Bases

All Star Bases raise their own food and maintain a self-sustaining industrial base to manufacture their own spare parts. Their personnel can live and even thrive on most worlds their Star Bases are built on.

The Tellarites, past masters of bureaucratic bickering, produced the surprisingly efficient operating format for all Star Bases. The original idea was for the Star Bases to be the supply and communications center for Star Fleet, but given the vastness of the spaces expected to be settled and the lack of other facilities this concept was expanded markedly. It would take too long by subspace radio, for instance, to have major decisions made by an authority in the heart of the Federation when any competent administrator with a knowledge of the Federation's goals and the tools at hand could do just as good a job locally.

Each Star Base was thus designed

to act as an administrative clearing house for all Federation matters within its assigned region. Situations that it can handle with available resources, it does. Larger matters it can tackle and call for help. A Star Base is like a police or fire dispatcher, taking calls for help, weeding out the cranks, giving reassurance, and sending in the troops when needed. Whenever Star Fleet is credited for saving the day for someone, it's a sure bet that a Star Base is the real hero.

If a world suffers an outbreak of some previously unknown disease that can't be cured locally, it calls for Star Fleet's help. The call usually goes directly to a Star Base, unless a Star Fleet vessel is close enough and capable of helping (not as often as some people believe). At the Star Base the disease may be recognized as a known one, and medical teams with the proper medication and treatment dispatched. Once in a while the disease may be unknown in this Star Base's region but known in another, whereupon the second Star Base will send medical supplies to the first by the first available Star Fleet vessel usually diverted from other duty. The Star Fleet crew bringing the help to the afflicted planet gets all the credit, but it was the Star Bases in the background that solved the problem.

If a hostile armada is encountered, it's a Star Base that must learn where the enemy is, how large their fleet is, and direct Star Fleet forces to counter it. Should there be a serious disaster in space; a world threatened by a nova or collision with another heavenly body, a Star Base coordinates rescue efforts and even assigns research teams to study the crisis. When space is mapped, a Star Base decides where the ships it assigns are to go, and when petitions for colonization come in a Star Base handles the choice of world, if it hasn't been made, and arranges for transportation, initial settlement, and integration into the communications net. (Not that some worlds aren't settled by private groups without Federation help and support; such settlements are not usually illegal unless the world is protected by the Prime Directive or prohibited for other reasons.) When tradeworlds are established a Star Base is obliged to police it if requested and supervise the trade flow. It's all dull work, but somebody has to do it.

Inside a Star Base

Star Base designs vary so much from world to world that a description of one may not be applicable to any other. Andorian designers, skilled in fitting machines to a task and structures to suit people, worked on each Star Base individually. Over the years, the basic components of a Star Base have remained remarkably consistent. The original multiracial design teams planned and built well. Whether a Star Base is a hollow planetoid, an ice world, or a paradise, they all share the same individual departments and offices to serve Star Fleet and the worlds in their districts.

An old Academy saying on how to find one's way around a new duty station says, "If you're in a Star Base, just remember it's only Star Fleet in a box." All departments in Star Fleet (listed on Pg. 14 of the *Cadet's Orientation Sourcebook of ST:RPG2*) have offices in all Star Bases. They are *not* divisions of the main offices; they *are* the main offices. They make the front-line decisions. The size of these offices vary widely, depending on the population of the Star Base's district, but the average workforce in administration alone is between 5,000 and 20,000 personnel. Some offices, like the Military Operations Command and the Marine Corps Command, are almost wholly Star Fleet. Others, like the Legislative Affairs and Judge Advocate divisions, are primarily civilian. Many people unfamiliar with Federation policy are surprised to find that the Office of Star Fleet Reserve is staffed purely by civilian employees who are themselves reservists. The Federation prefers that people affected by their policies are assured of input in their making and enforcement.

Mostly, the administrative offices are invisible, though their workforce is perhaps the largest portion of the Star Base's total personnel. More visible to casual visitors are the large arrays of services and goods available for Star Fleet and Federation bases and settlements within their service region. Every Star Base has extensive shipyards and orbital drydocks and ground shops, capable of servicing six or more vessels at a time. Star Bases also maintain a fleet of tugs and shuttlecraft equipped for in-system and deep-space recovery of vessels and personnel. The size of a Star Base shipyard workforce is supposed to be classified, but most are between 2,000 and 6,000 workers.

Star Base medical facilities are equal to any on the Federation homeworlds; perhaps better. Their hospitals, research labs, clinics (mobile and fixed), and emergency teams regularly confront challenges from space that do not exist elsewhere. In addition, they have unique opportunities for the study of alien life-forms and Federation personnel in alien environments. It's hardly surprising that from 2,500 to 4,500 medical personnel are attached to or work at each Star Base. Star Fleet has a large number of physicians from all worlds seeking service on Star Bases for the opportunities in education and experience they offer. The Federation tries to accommodate them all, advancing medical science as quickly as it can.

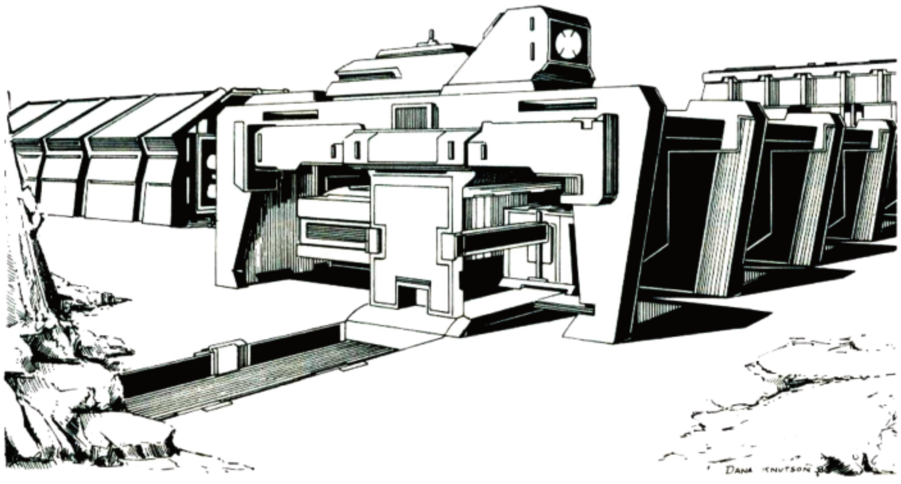
One of the more publicized functions of a Star Base is paradoxically one of the smallest: recreation. At any one time a Star Base may have up to 1,000 visitors, from starship crews to diplomatic functionaries, who must be housed, fed, and amused when not at work or on duty. Rarely does a Star Base's housing and hospitality unit number more than another 1,000 mostly-civilian workers.

Star Base quarters for all visitors, Star Fleet or not, are not at all like starship fittings: who wants to go from one curved-wall box to another? Star Base accommodations take on the ambience of the Federation homeworlds, giving Andorians their high walls and acoustic pastels, Vulcans their meditative dark, Tellerites their comfy open debate pits, Humans their massage beds and jacuzzis, and everyone gardens, pools, native music and entertainment forms. It's hard to find a Star Base without a tri-dimensional chess tournament or round-robin multiship bowling league. And, of course, Star Bases also accommodate the decor of the major races, Federation members or not, whose worlds fall within their region. The Orion design of many of Star Base 27's interiors and exteriors has often provoked comment, not all of it printable.

Since Star Base external environments are often quite different, the opportunities for outdoor activities vary tremendously. Nearly all Star Bases, however, have civilian offbase areas with nightclubs, bars, arcades, theaters, concert halls, and other pricey diversions which are not Star Fleet regulation.

These offbase areas are features that the Star Base designers did not fully anticipate. The proliferation of mining, manufacturing, trading, and service-industry firms has been more rapid than the Federation expected. It was only natural, given the high volume of traffic through a Star Base, but the Federation has not yet decided if this is a boon or an embarrassment. Offbase entertainment areas save the Federation expense, but a lot of that saving is absorbed in expanded Security forces to patrol them.

One of the more obvious draws to a Star Base for developers has been the strong defenses, making Star Bases the most secure worlds in their region. A Star Base, besides having a sizable Security detachment of its own, also has the central Federation Marine Corps barracks, complete with weapons and vehicles for up to brigade-sized units for protection on the ground. Against attack from space, a Star Base would rely on Star Fleet vessels primarily, but it has fixed defenses of its own on the ground, admittedly of dubious value in an era of energy bombardment from space. Still, with electronic jamming, ground-based phasers, spot-shields, and tractor-pressor beams a Star Base could prevent most of its surface structures from being slagged and enemy infantry from beaming down inside the compound. An unofficial (and disclaimed) assessment of defenses estimates that it would take the firepower of three heavy cruisers or their equivalent, minimum, *plus* a landing force of 5,000 troops with heavy weapons, vehicles, and air support to vanquish a Star Base. Aside from the Marine detachments not even estimates are available for the number of Star Fleet personnel solely concerned with defense.



In point of fact, no Star Base has ever been taken by an enemy. The incursions into Federation space by the Romulans and Klingons did not conquer any system containing a Star Base. The Romulans were contained before they reached any, and the Klingons, though they penetrated as far as Axanar in the Four Years' War, did not destroy the Star Bases they bypassed, though they did raid them heavily.

Communications, from subspace radio to mail to parcel and cargo handling, is a major Star Base feature, absorbing another 2,000 to 5,000 personnel. Like the administrative work, everybody benefits from it, but few understand how it works. The enormous array of antennas, transmitters, control and processing centers is only the most visible evidence of a Star Base's vital role as central arbiter of its region's communications. A Star Base handles all the radio traffic for vessels in its area. Additionally, it handles all general-purpose transmissions and electronic mail for worlds without their own subspace radio capability. Newsfax, entertainment programs, personal mail, transcribed magazines, newspapers, scientific journals, and many other broadcast materials are received and retransmitted or transcribed and then shipped or beamed from Star Bases daily. An equal flow of information goes back through Star Bases to the rest of the Federation. Solid mail, mostly parcels and bulk cargo to be shipped to other destinations, may be sent through a Star Base for surer delivery and lower costs, though it often isn't as fast as direct cargo-carriers. Still, a world 500 parsecs from Terra with only a handful of colonists or scientists on it may not be able to afford a cargo ship making a single run out to them. A more common system is for shipping requests to go through a Star Base, and then have a local cargo-handler bring the goods out. Someone once dubbed this system 'RFD,' which many suppose to mean Rapid Far Delivery. The actual origin is obscure.

Few Star Bases are sited in scientifically interesting locales, so their resident science staffs are small. Federation science teams, attached to Star Fleet vessels, in ships of their own, or in bases in promising locations, are usually found in the field. Not all science parties are Federation-funded, however, research groups from universities, member worlds, and even private corporation prospecting teams may be in a Star Base's district. The Federation commonly asks that all such groups relay their findings through the nearest Star Base, to be analyzed for free. Research in scientific literature and relay to home stations is performed in return for sharing in the information. The objective is furthering knowledge of Federation space by all means possible. Most groups comply, though they usually ask that the data not be further disseminated pending completion of their work.

Some privately-funded research parties, interested in the proprietary value of their work, do not report their findings back to a Star Base. This is perfectly acceptable and legal. But sometimes vessels venture where they should not, and do not tell their local Star Base where they are. The Federation does not prosecute these people unless they trespass on a protected or prohibited world, but they make a point of bringing charges against individuals who sneak around without telling Star Fleet and get themselves into trouble. It annoys and alarms Star Fleet that these people get themselves into a tight place without at least informing someone of their whereabouts. The Federation respects the right to privacy of information if asked, and has a good record of keeping such matters private, but they feel that someone investigating gravity phenomena around a collapsar should at least *tell* them so they know where to look for the wreckage and survivors.

Command, Control, and Authority

Many people have been surprised on visiting a Star Base to find that it is not called a seat of government. Its commander, holding the rank of Commodore, issues no decrees, signs no legislation, and kisses no babies. Yet he or she and the staff of the Star Base make decisions every day that determine the livelihood if not the very survival of millions of people in the Federation and outside it. Star Bases control large administrative and military forces, and have much to say about the flow of trade, personnel, and materials into and out of their district.

A Star Base is not expected to anticipate unusual situations or prepare for them, though it can if its Commodore finds enough reason. Officers in the field are expected to know more than the people behind the desks about things in the field, and their observations and recommendations are listened to most carefully. It's a Star Base's job to help them, not order them around. And superior officers of flag rank, whose personal experience is of incalculable value, have authority over Star Bases and their subsidiary bases as over any other part of Star Fleet. A Star Base is only a support system whose job is to make it possible for Star Fleet to do its job. Nothing more.

But recently pressures have been felt on the Star Base system, pressures that may cause a change. Even though Star Bases are not capitals, for their assigned regions they are effectively the same thing, and sizable populations have grown up around them on their sited worlds for the same reasons of centrality and proximity to decision-makers that affect the people of star empires. The settlements around some Star Bases are several times the size of the Star Base's own personnel, and feature all fixtures of a regular colony world: a spaceport, regular trading routes, a growing indigenous population, self-sustaining industry and agriculture, and even a recognizable separate entertainment/cultural tradition. "When a world gets populated enough to have its own movie industry," says Dr. Richter of planetary civilization study fame, "it's big enough to apply for (Federation) membership."

All this rapid growth was not fully anticipated, and has put a threefold stress on the existing Star Bases. The larger population has made the Star Bases more dependent on them, eroding the self-sufficiency that was a primary goal. The larger population, moreover, since the Star Base relies on it, must be defended. Most Star Bases are less than 200 square kilometers in area, and their offbase regions many times this size, so the cost and complexity of defense goes up dramatically. And thirdly, while civilian enterprises have taken over many of the non-Star Fleet tasks of Star Bases, some of the vigorous care with which the Star Base conducted these tasks has been lost. Star Bases may be in transition from frontier outposts to purely administrative, inspection and licensing bodies; seeing the problem in perspective, a recent Federation Special Commission asked a startling question: are Star Bases obsolete?

The High Council has pondered this question, and returned a firm no. There are now 31 Star Bases throughout the entire Federation. Some of these are now deeply embedded in heavily-settled space and some are in rapidly developing districts. In all these places, though civilian settlements crowd around or fail to materialize, the mission of the Star Base remains the same: support Star Fleet and the spread of Federation institutions deeper into space. Star Bases are a success, and they will remain a success.

And yet, it being the business of the Federation to build for the future, it may someday be necessary to create a new kind of installation to provide for a future Federation. Several organizations, including the Vulcan Academy of Sciences and Terra's Stanford University Institute of Space Studies, are rumored to be developing ideas now for the Star Base Successor System (SSS). No details are forthcoming, but the target date for the SSS is said to be at least a century away from the present, when the Federation's population, now about 71.8 billion, will pass the one trillion mark.

In the meantime, existing Star Bases may have to make some adjustments to keep pace with the present they were supposed to stay in front of. Star Base Three's world has applied for Federation membership. With a population approaching 100 million and planet-wide development, two major civilian starports and another building, they seem assured of acceptance. But it bothers some Council members that the world is the site of a major Star Fleet base; about as much as it bothers them that the world wants to be officially known as Star Base Three. A Councillor has compared the situation to the founding of some major Terran cities on ancient Roman army camps, an unexpected expansion of fortified sites intended to open the frontier. The Tellarites, true to form, disagree, and say that the original idea remains a separate entity with all its original powers and duties intact. The Star Bases were meant to take Federation civilization out into space. Well! There it is, right next door. Star Bases continue to work as they always have, and will into the future.

And that is a truth even a Tellerite would not long dispute. ★

Star Trek Game Material

by Pete Rogan

Some Star Bases: A Profile

Condensed From the Pages of *Ports Illustrated,* The Space-Traveller's Most Valued Magazine.

Star Base Three: Actually the second Star Base to be built (Four was first), Star Base Three was a serendipitous choice for a site. It was built on a Class M world so much like Terra that the Federation spent a month on intensive ground surveys making sure no developing intelligent life-forms were present. There was even a memo of protest sent to the High Council, complaining that so colonizable a world should not be used only for a Star Fleet base; this memo opened the door to co-settlement of Star Base-bearing worlds by civilians.

The actual base was constructed from Stardate 0/8908 to 0/9004 on a fertile plain near a large body of water which was named the Sea of Serenity. The base occupied low-lying land, leaving the rest of the plain for agriculture. Its original area was only 65 square kilometers, with a total population of 8,900. At the time it was built, Star Base Three was far beyond the frontier. It took a typical vessel of the day, travelling at slightly more than Warp 2, nearly eight months to reach it from Terra.

The history of Star Base Three has been peaceful and placid. Later Federation settlements nearby made it attractive to colonists, and after the scare of the Romulan War, the High Council decided it was foolish to keep people from a habitable world so close to the Federation's vital trade routes. Basetown (later called Halina, after the major salt-mine nearby) was founded 20 km. from the Star Base. It had a population of 640.

Over the years Star Base Three has served as a major jumping-off point for colonial expeditions to nearby worlds. The development of many prosperous colonies and the lack of a hostile foe to face has lent Star Base Three the title of 'Star Fleet's Pearl Harbor'; a peaceful frontier outpost waiting to be taken by surprise. This Star Base has been so trouble-free that even the joke has faded.

Nowadays Halina, with a population of 2.3 million and an excellent spaceport, is the capital of a world-state with a total population of 96.8 million people on two continents, seven major islands, and with plenty of room to grow. The Star Base has been dwarfed by the civilian expansion, though it now takes up some 150 square kilometers and has 29,000 personnel, two orbital facilities, and eight space drydocks. Star Base Three's application for Federation membership is expected to be approved within the year, making it the first Star Base world so honored.

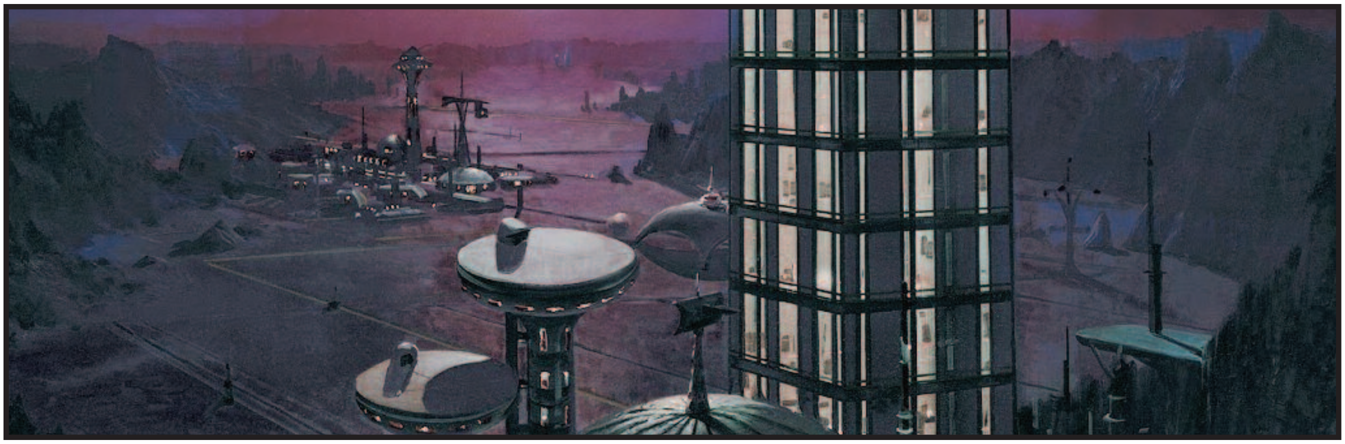
Star Base Five: One of the more unusual Star Bases, first to be built in a totally hostile environment; the interior of an asteroid.

The system at the intended point of construction was found to contain only a couple of massive gas giants and several rings of asteroidal debris. After some hasty engineering surveys, one of these with a high metal content and unfractured, was selected as the site of Star Base Five.

A net of fusion reactors was tethered around the asteroid and made to spin, generating a huge magnetic field. Through induction the interior of the asteroid was slowly melted away; a robotic drill then sent a hollow tube into the asteroid's interior and pumped millions of decaliters of neon gas into it, literally blowing the asteroid into a bubble ultimately 8.1 kilometers across. When it cooled, an access was cut into the asteroid's side and construction began on the first pure-space Star Base.

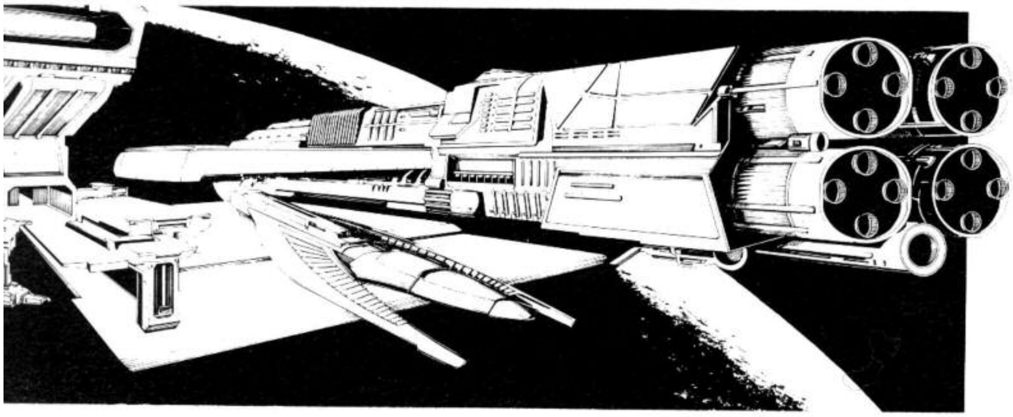
A square door, .75 by .5 kilometers, gives access to the inside of the nearly spherical, almost natural-looking planetoid. Within the Star Base are three long axial support shafts meeting at right angles at the center of the docking space, where 24 ships can be moored without crowding. The tubes give access to the ships and to the opposite sides of the Star Base, which is built in concentric layers of decking with 'up' towards the center of the asteroid. These decks contain not only the Star Base and its complement of 12,000 but the hydroponic systems needed to keep Star Base Five self-supporting. Power comes from six reactors spaced throughout the planetoid shell; water and air are nearly perfectly recycled, requiring only slight replenishment every year. Building this engineering marvel took only three years.

Incredibly, Star Base Five has a civilian settlement inside it. Technically the private tunnels are only rented, having been built by the Corps of Engineers to Star Fleet specs, but a non-Star Fleet population of almost 17,000 lives there. The major civilian



industry is offbase entertainment, which is reported to be the best in the Federation.

Star Base Seven: Star Base Seven's sun is a Type B blue-white giant star, its world a Class G desert planet with a very limited biosphere. Like Star Base Five, it is self-supporting only through hydroponics and life-support. Most of it is buried; sunken into solid rock in a low range of hills to protect it against extremes of temperature (a change of as much as 50° C). Its simple and few surface structures, rounded and low to reduce sandstorm abrasion damage, make it appear to be a minor outpost. Only the orbital drydocks and the larger-than-expected landing field betray its status. Some 11,000 personnel live and work here, a relatively low number, as settlement in Star Base Seven's district is still spotty and small.



Civilian colonization near Star Base Seven is limited. Near the Star Base is a small city called Seventown, with a population of 1200 or so; no one seems interested in finding out exactly how many live there. A minor spaceport handles what little civilian traffic there is, mostly spare parts and luxuries for local and district consumption. Seventown's residents tend to be human and Orion, with a scattering of Vulcans and other hot-planet types. Evaporator farming is the norm here, making extensive use of moisture traps and transparent film to grow about 60% of the settlement's food, the rest being shipped in. Scrap yards, salvage companies, and private shipping firms are the major local industries. The area is generally poor and unattractive; even the offbase is depressing, and the incidence of robberies and criminal assaults in Seventown is higher than on many frontier worlds.

Some 25 years ago a colony ship with as many as 250 Sufi religious fanatics made a landing in the high desert far from any habitation. A rescue team found that the ship had landed safely, and then been burned. No trace of the Sufis was ever found, but now and again an outlying farm or ground-truck is ambushed by raiders and stripped of food and survival items, so Star Fleet believes they are still alive and living as nomads.

Star Base 16: Class N (pelagic) worlds are not as common as they could be, but, as one disgusted sea-farmer of a 100% hydrosphere planet has said, "one is more than enough." They are very productive planets for hydrologic agriculture, but the costs are high, weather is usually uncontrolled, and construction costs are unbelievable. Star Base 16, in being built, ran up the highest per-site cost in the Star Base construction program: 790 billion credits!

To reduce later maintenance costs, the Star Base was placed mostly underwater, in a region known as the Conat Shallows on Alpha Shelf; a continent too short to break the waves. Like a vast single building, the Star Base stands above the world-ocean floor on massive pillars sunk nearly 500 meters into bedrock. Its surface installations, antennas, the landing fields, surface transportation, and some recreational facilities, are actually above the surface on massive airy lattice towers reaching almost 100 meters above the waves. The result is one of the most spectacular single constructs in the Federation, a massive 20 square kilometer roof standing on stilts 200 meters above an even larger submerged structure.

Recreation on Star Base 16 is unlike that on any other Star Fleet base. There are the expected surface and submarine craft to be rented, sport fishing and rec-diving, even surfing on the beaches of nearby Welter's Island, but there is also the Star Base 16 Bathhurst Memorial Golf Tournament held yearly in mid-summer (weather permitting). With the aid of a few raised astroturf pads and some imaginative if not outlandish woods, hazards, and traps, a corner of the landing surface hosts teams from the local personnel and several visiting starships. Last year's events included an officers vs. enlisted men tourney, Life Support Technician 2nd Class Ernestine McCullough leading her team to a thrilling two-stroke victory over the department heads of the Kongo, Cerebus, and Ramses.

On nearby Welter's Island, connected to the Star Base by subsurface tube, is the town of New Ft. Myers, population 1,562. A bustling, busy little place, it is the largest fixed civilian habitation on the planet, matched only by the town of Malibu halfway around the equator, and boasts the only spaceport, a small facility handling foodstuffs going out and many products, mostly luxuries and manufactured goods, coming in. The great majority of Star Base 16 inhabitants live and work on floating seafarms, tethered or circulating (not drifting!), and on factory ships doing the major processing and packaging. Altogether, aside from the Star Base proper, the world has some 14,000 people who call it home.

Star Base 27: The nearest major Federation installation to Klingon space is Star Base 27. When this establishment was designed (before the Four Year's War) it was intended to be a little larger than normal, being situated on the trade routes between the Orion worlds and the original Federation planets. There were pirates operating in the area, the Orion slave trade was in full bloom, and Andorian/Orion clashes were almost weekly occurrences. Star Fleet wanted some muscle in the region.

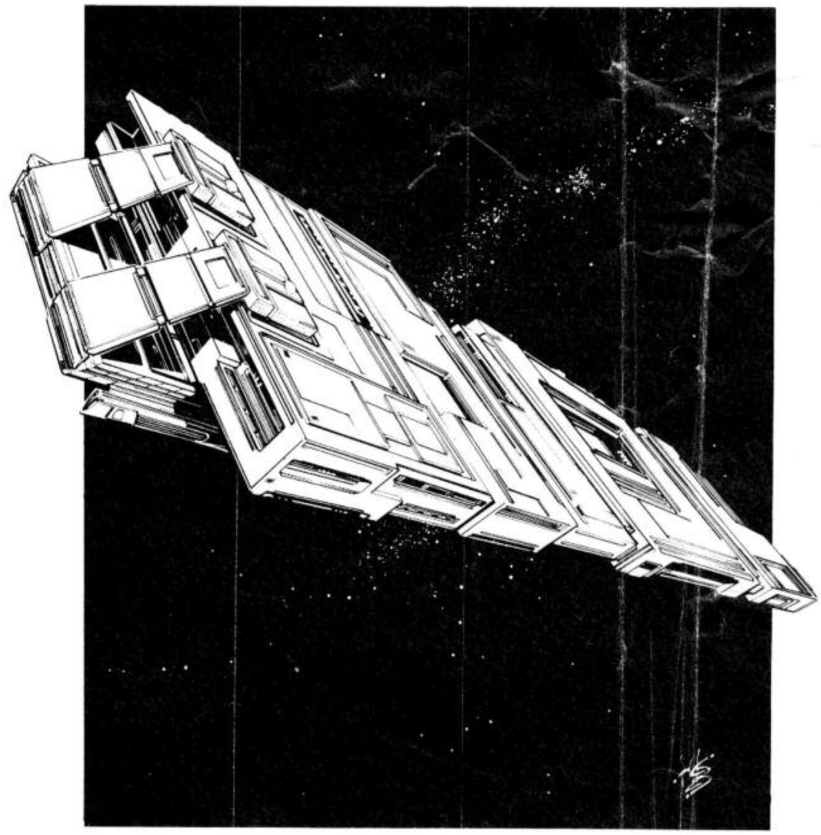
Star Base 27 was only a hypothesis when the Klingons were first encountered. It was only a happy accident that the Base was nearing completion when the Four Year's War erupted. It was only 86% complete, and in spite of great demands closer to home, Star Fleet rushed to finish the Base even though the Klingons were approaching at a frightful rate. It was Star Fleet's hope, as then-Captain Garth of Izar later said, that "the Klingons would miss it, and we would finish it in time to use it, and we would have enough of Star Fleet left to make the cost worthwhile. We never had three more desperate chances rolled up into one." The only reason all three chances came through was because the base had been started too late for Klingon intelligence to find out about it. They never knew the Base was there until they literally stumbled over it, long after they had suffered from Federation ships they thought were out of action that had been repaired and sent back to pummel the invader afresh. Diversion of badly-needed men and ships from their campaign to secure Axanar harmed the Star Base little and hindered their own over-extended operations. By the margin of one Base with its concrete still raw from the mixer the Klingons were halted. The Federation has labored since to make sure that it does not happen again.

The actual size of Star Base 27 is classified. In area, it is a little more than 195 square kilometers, the largest Star Base in the Federation. It was enlarged greatly after the war and has an on-base population of somewhere over 40,000, making it twice the size of normal Star Bases. It is also said to have extensive underground tunnels and galleries equalling the size and volume of the surface structures. Curiously, even its orbital facilities are wrapped in mystery. The Federation says only six drydocks and three support stations are in orbit, but as many as ten docks and six stations have been reliably accounted for, and one report claims 15 docks and ten stations! Significantly, the Federation maintains a Marine Corps Command presence here of at least two divisions, but admits only to "forces in excess on one brigade".

For all its secrecy and armament Star Base 27 is one of the most cosmopolitan and beautiful of Federation worlds. It is a dry and rocky Class M planet, a little cool, but with the charm of Terra's Scotland. Out of deference to the nearby Orions, and to leaven the prairies and rockfields, many of the Star Base's structures were built gently swelled, bulbed, bulged, and fluted in the Orion style. The result has been so striking that Star Fleet has given up prohibiting tourists from taking pictures. It was easier, says one Security Department chief who wishes to remain anonymous, to simply camouflage the buildings.

It is illegal to photograph or scan the Star Base from space. Aggressive patrols by manned and unmanned vehicles insure that no object larger than a golf ball even approaches sensor range without approval. This is most impressive considering the Star Base's large civilian population of 65,000, including a larger-than-expected proportion of which is Orion, not known for their love of Star Fleet. Actually, the Star Base 27 settlements are the most carefully planned communities next to any other base in the Federation; their economies, macro, micro, and even underground, have been meticulously scrutinized and regulated. In any other sort of circumstances this degree of control would be intolerable to free people, but Star Base 27 serves a unique district of space. Few say that the penalty is too onerous for the reward.

The reward is in the hefty flow of trade between the Federation homeworlds and the Orion colonies, a flow that has grown over the centuries in spite of wars, revolutions, and pirates. The legitimate trade alone is worth some 650 billion credits per year, and the value of smuggled and undervalued or unreported goods and services may be twice that. It has been boasted that a major smuggler of Romulan ale himself lives on Star Base 27, although no one knows if this is really true.



Star Fleet does not rely on the Star Base itself to defend this prosperous and endangered region; more than 300 other outposts with military purposes, more than in any other Star Base's district, monitor the Klingon and Romulan Neutral Zones, keep an eye on Orion movements, and support smaller Star Fleet detachments behind the frontier. These range greatly in purpose and secrecy, from the great series of deep space stations that are open even to Klingons on our side of the frontier, to the new and sophisticated Epsilon series of monitoring posts, to the heavily-armored and defended outposts on the Romulan Neutral Zone. And these are not all; from scattered reports comes word of secret Star Fleet emergency depots and communications centers in case mighty Star Base 27 is ever destroyed. For, after all, its location is no longer any secret to the Klingons, nor, presumably, to their erstwhile allies, the Romulans.

Visitors to this Star Base should not miss the War Memorial on nearby Zeddies's Peak; the hulk of a Klingon destroyer is preserved there as it looked the day it crashed during a raid. It is surrounded by 7.31 kilometers of black marble on which are inscribed the names of all those, Star Fleet and civilian alike, who died in the Four Year's War. ★

The Federation Guide To Luna

The Moon in STAR TREK™: The Role-Playing Game

© 1984 by Dale L. Kemper

Nearly every Federation citizen, human or otherwise, has had a desire to visit the Sol System and the planet Earth. No trip to the "Blue Planet" would be complete, however, without a sidetrip to one of the most famous planetary satellites in known space: Luna, Earth's Moon.

Part of a 1978 U.S. Geological Survey map of the Mare Orientale region of the Moon appears below. The scale is about 1"=132 km.

CREDIT: DEPARTMENT OF THE INTERIOR U.S. GEOLOGICAL SURVEY

The Moon of A.D. 2210 has lost none of the awe-inspiring power it has shown humanity for eons and still brings a sigh from those watching from Earth as it rises on the horizon, orange and full. Now, of course, the Moon means even more to humanity. Some 4.23 million beings, most of Earth/Luna human origin, live in the twenty-four domed surface and underground cities located on the Moon.

The Moon is well known for its mining industries, located primarily at the Clavius Mining Complex, as well as for the research and medical centers there. Today, however, the main economic resource for the Moon and its inhabitants is tourism. The Moon is an important stop on most Earth tours offered by the major interstellar travel agencies. In addition to out-system trade, the Moon is a popular recreation and vacation spot for Earthers who long for the thrill of space travel without straying too far from home.

Many interesting and varied experiences are offered by the lunar resorts, the most popular of these being the dust-skiing complexes located at Mare Imbrium and Mare Nubium. Dust skiing was recently included as an event in the Federation Interstellar Olympic Games; the Earth and Luna teams have their training facilities here. The Mars team has considered joining their colleagues, but for now they still use the slopes of Olympus Mons on their home planet.

Other points of more historic interest include the Goddard Moonbase Museum, located on the site of the first permanent lunar base, at Goddard Crater. Opened in A.D. 1998, Goddard Moonbase was still being used for various duties (ranging from geologic research to spare-parts storage) until the early 2100s, when the present museum was constructed.

The Tranquility Base Historical Site, with its impressive Apollodome Complex, is another must for any lunar tourist. For a nominal fee, many resorts around the Apollodome Complex offer guided tours of the various landing sites of the first Apollo moon missions and the landing sites of a few of the Ranger, Surveyor, and Luna probes that went on their information-gathering missions centuries ago.

Tourists with more current interests may visit the Star Fleet Disposal Yards, located in and around Mare Orientale all the way to the Cordillera Mountains. Out-of-date or heavily damaged vessels from the different branches of Star Fleet are collected and disposed of here, either by scrapping, cannibalization, or sale to the numerous parts dealers and used-ship brokers with offices in the surrounding cities. Orbiting above the Star Fleet Disposal Yards is the Quadrant Reserve Fleet, mothballed here for possible future service during an emergency. Parked in permanent low orbit, these hundred-odd vessels make a spectacular sight when the Sun sparkles off their silvered and protected hulls.

When touring the Star Fleet Disposal Yards, it must be remembered that this is a Federation Security Zone and the proper clearances must be obtained before any personal tours of vessel debris, wreckage, or hulks can be conducted. A number of junkyard areas in the Yards are considered dangerous and are prohibited to unauthorized personnel; these areas often contain active elements from warp-drive engine components and other unstable materials.

One of the most interesting scientific sites on Luna is the Dome Complex of Taenarium Observatory, located precariously on the promontory of the same name. This astronomical research center is still going strong after five add-on reconstructions and two hundred years of continued heavenly observation. The many architectural and structural design changes give the complex a unique look as it winds its way up Mount Arzachel, 3960 meters above the dusty floor of Mare Nubium. Taenarium Observatory remains the oldest and most prolific scientific institute on the Moon.

Another favorite tourist stop is the Clavius Mining Complex, opened in A.D. 2004. It was here that materials were mined for the first L-5 space colony, which opened in A.D. 2007. When interstellar colonization superceded interest in the L-5 colonies in the late 21st century, the Clavius Mining Complex fell on hard times (as did most of the technical industries located on the Moon). Eventually, the mines were reorganized to provide for the needs of the lunar inhabitants only, and a thriving, if somewhat diminished, economy was again established.

The underground and domed surface lunar cities are a wonder of technological achievement. Maginus, the administrative capital of Luna, is the largest urban area, with just over 800,000 inhabitants. Located northeast of the Clavius Mining Complex, Maginus is home to many of that facility's workers, who travel to the mines using the underground magnetotube shuttle system. In accordance with the independent attitudes of most lunar residents, the government is composed of an informal administration that coordinates local activities, with a combined Federation/Star Fleet Assistance Committee to provide whatever extra help the residents might require.

Politically, the Moon remains independent of Earth, although a healthy respect is given her "big brother," and preferred trade partnerships are common. This was not always the case. In the early 21st century, Earth insisted on governing the growing lunar population when it became apparent that lunar industry was undercutting terrestrial mineral and technology concerns. After years of difficult negotiation, these differences were laid to rest, and this has led to the continuing state of cooperation seen today between the worlds.

The largest city on the Moon's farside is Farside V, with a population just under 200,000. Formerly scientific bases, Farsides I through IV are now tourist resorts connected by magnetotube to the hub of Farside V. Not surprisingly, most lunar settlements are located nearside, facing Earth. Aside from being heavily surveyed and mapped, the nearside has a mystique associated with its view of Earth that appeals to tourists and inhabitants alike.

Tourists and residents often point out an apparent social difference between lunar settlers, perhaps the only one of consequence. "Nearsiders" are said to be more conservative and refined than the "farsiders," who are generally described as independent and informal in attitude. Some reports circulate of prejudicial treatment of "farsiders" by certain restaurant and resort employees on nearside, but no incidents of major significance have been reported.

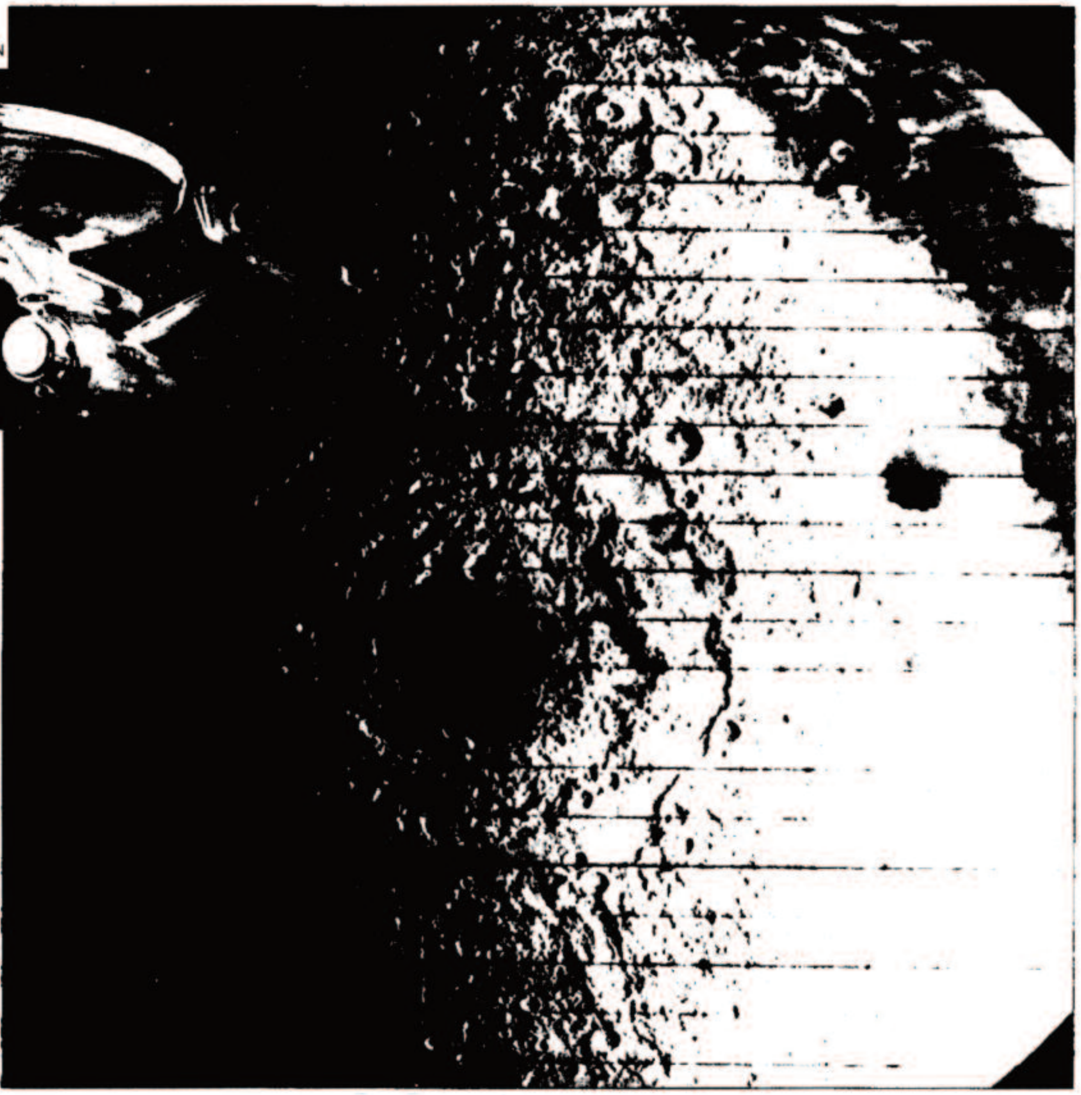
Some of the other interesting cities on Luna shouldn't be missed if there is time for an extended tour. Petavius (120,000 inhabitants) is famous for the Petavius Needle, rising 1.07 km high, the tallest man-made structure on the Moon. A revolving restaurant caps the tower, and the view is considered the best that one can get from the "surface."

Janssenville is an architecturally interesting lunar city. Built along the base of a 147-kilometer long V-shaped cliff, the city could be considered the longest in the Federation. The outer edge of the complex is made up of shielded, transparent ports that look out toward the municipal spaceport/shuttle landing area and the outlying settlements in the Rheira Valley beyond.

Selene City in Mare Nectarus is another interesting stop. Considered the Moon's largest industrial center, it is the headquarters of such firms as Astro Moonbuggy, Ltd., General Oxygen (listed as GO$_2$ on the Federation stock exchange), and Ultraski, the official supplier of dust skis to the Federation Interstellar Olympics.

PHOTO COURTESY OF FASA CORPORATION

Above, a view of the uprated Federation heavy cruiser NCC 1701, the USS Enterprise, in lunar orbit.



Orientale Basin, right, as seen by Lunar Orbiter IV in 1967. the basin has two rings of mountains, 950 and 600 km across. The outer ring, the Cordillera Mountains, has peaks as high as 6100 meters. The inner mountain range is the Rook Mountains.

PHOTO COURTESY OF NASA

The twin cities of Eddington and Lunicgrad are also part of most tour packages. Located in the Sinus Iridum, the twin cities contain more above-ground construction than any other lunar urban area. Composed almost entirely of a series of large interconnecting domes, the two towns drew closer together as a result of new construction and finally overlapped. Most inhabitants now consider them a single city, known by various names such as Eddingrad, Lunicton, etc.

Transportation is no problem on the Moon. Most urban areas and their environs are connected by the underground magnetotube system. One can also take the instantaneous transporter system that uses an automated orbital relay station (any ship in orbit will do as well).

If adventuring is more one's style, or one doesn't wish his molecules scrambled, there is the ever-popular Luna Jump Buggy Service. These vehicles can accomodate up to two hundred passengers and run on eight huge bulbous tires. They also have an extensive array of thrusters to help them "jump" lunar terrain obstacles and debris. This gives an interesting ride that harkens back to the old rollercoasters of Earth's amusement parks. In addition to jump buggies, there are a number of private land rover and grav vehicles for hire at every city municipal spaceport.

For traveling further afield, a number of transportation systems are available. The Earth/Luna Shuttle leaves twice daily from Maginus Municipal Spaceport, with stopovers at the Tsiolkovsky L-5 complex and the Earth Orbital Services Station, near the Star Fleet Construction and Repair Yards. Within the next few years, a long-range transporter system will be put into operation; using one of the L-5 colonies as a relay point, passengers can be transported between the Earth and Moon in a matter of seconds.

Even now, it is not a time-consuming trip to reach the Moon. Any vessel going Warp 0.1 on Impulse power can reach the Moon from Earth orbit in 11 seconds. The Earth/Luna Shuttle takes forty minutes due to stopovers and loading/unloading, however. For quick exits from the lunar scene, merchant and passenger vessels in orbit may be boarded by transporter or shuttle service at any city spacecraft landing area.

No military presence is maintained on the Moon, save for the Star Fleet Disposal Yards. This is not considered a critical situation, as warships from Earth and other nearby worlds visit constantly. The Moon is also included in Earth's defensive perimeter in case of armed attack on the Sol System.

The Moon of A.D. 2210 has been civilized in many ways. It can, however, still be a place of danger and death to the unwary. Even with centuries of development, the Moon is a dusty, inhospitable wasteland with a few islands of humanity amid its rocky seas.

Adventuring on the Moon

Like any planetary body, the Earth's Moon in the STAR TREK™ game universe is full of adventuring possibilities as wide-ranging as the gamemaster's imagination. Some suggestions are provided below to get groups started:

1. A player-character (PC) team of Star Fleet personnel is on detached duty to the Lunar Disposal Yards and is given the assignment of locating the wreck of a warship scrapped a hundred years ago. Archives have revealed that on one of the ship's last exploration missions, some key documents were withheld by the ship's captain and hidden somewhere in his stateroom.

These documents give the location of a distant planetary system that is the subject of some unusual stories (vast riches located there, fabled lost race lives there, etc). If these documents can be found, an expedition will be organized to check these stories out. Of course, other interested parties may also desire these documents. If they beat the PCs there, or arrive while the PCs are inside the wreck, trouble could develop.

Gamemasters should work up ship deckplans if they desire, or use the existing FASA plans for Constitution class ships. Plans for the Reliant class (hopefully appearing in 1984) could also be used in this adventure.

2. A team of PCs is in charge of security for Federation installations on the Moon. Suddenly they are informed that an anti-Federation terrorist group from Earth has taken hostages and captured the Apollodome at the Tranquility Base Historic Site. They threaten to blow the site up unless certain demands are carried out. This, of course, is entirely unacceptable to the Federation authorities; the PCs are ordered to gather a strike team and retake the Apollodome before the terrorists have a chance to carry out their threat.

Gamemasters will have to create the floor plans for the Apollodome, keeping in mind that it is a museum of spaceflight history rather than a heavily-populated city area.

3. A command staff of PCs has been ordered by Star Fleet Command to report to the Reserve Fleet Control Office at the Star Fleet Disposal Yards on the Moon. There they will take command of the U.S.S. *Resolution*, NCC-382, and ready it for active duty as a target/decoy ship for fleet maneuvers.

Many difficulties will be involved in getting the vessel spaceworthy again after its lengthy period in mothballs. When the overhaul is complete, breakdowns may occur before the ship reaches the wargames area, ranging from annoying glitches to death-dealing disasters.

Upon arrival, the PCs must maneuver the *Resolution* in the games using piloting and command skills according to the difficulty levels required in the gunnery exercises. Of course, the vessel could be the target of nefarious hijackers who want to disrupt the wargames for some reason.

4. Other adventuring ideas can be produced for characters not working for Star Fleet. The Moon makes a good setting for a Merchant adventure using the STAR TREK game's TRADER game supplement. The familiarity players will have with the Sol System adds even greater realism and detail to such adventures, both on the Moon and the Earth in the STAR TREK game universe.

Those interested in adventuring on the Moon will find one playing aid extremely useful: a current map of the Moon. The one used for writing this article was a 1969 *National Geographic* magazine map, but other sources such as NASA have even more detailed survey maps. Actual maps of the gaming area add something special to the situation.

Good gaming in the Earthlight!

While visiting, be sure to stop for a friendly hello with the fine folks at Alpha Complex!

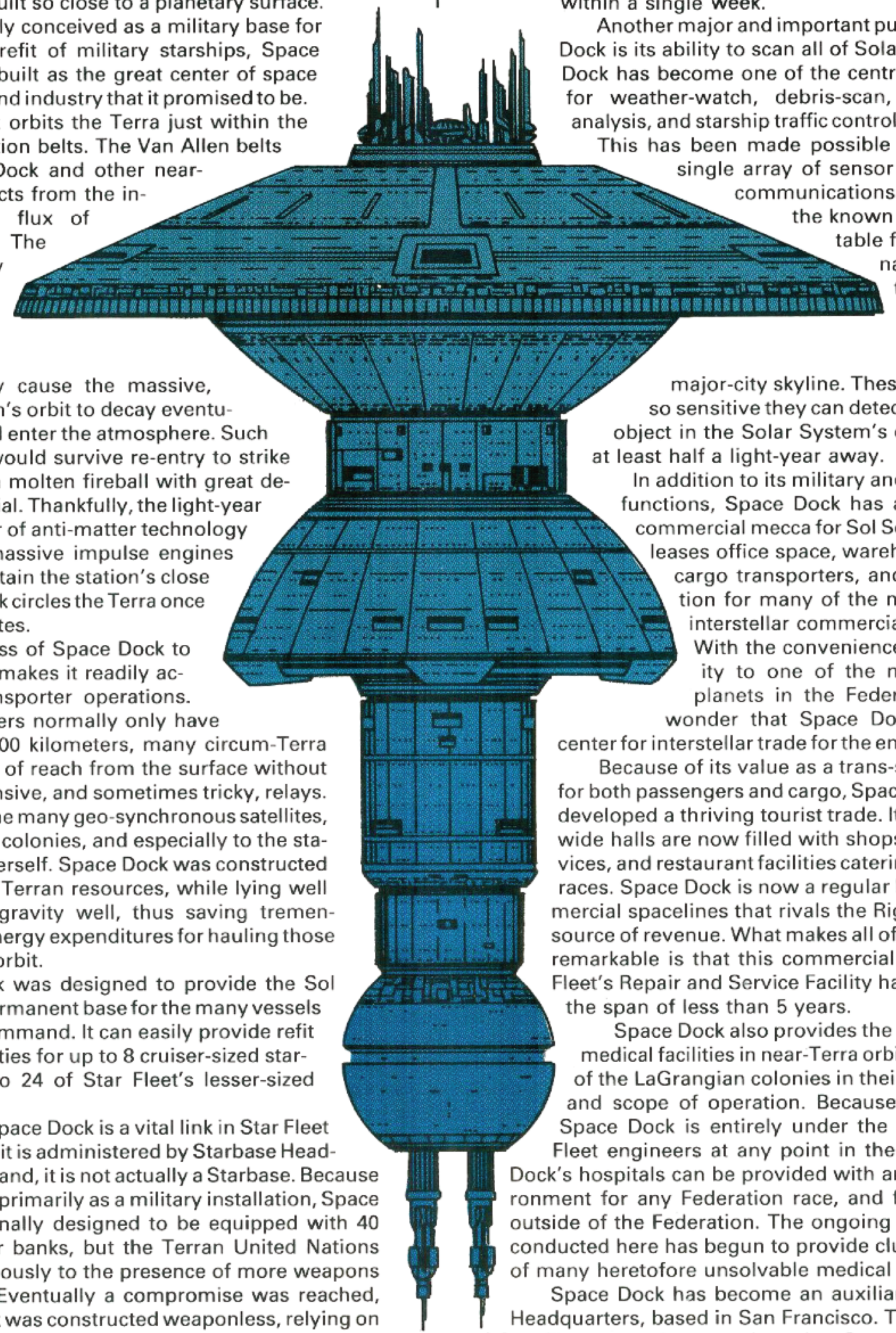
SPACE DOCK

By Michael Scott and Michael P. Bledsoe

Space Dock is the single largest structure in near-Terra orbit. Other space-built structures may be larger, but none has ever been built so close to a planetary surface. Though originally conceived as a military base for the repair and refit of military starships, Space Dock has been built as the great center of space transportation and industry that it promised to be.

Space Dock orbits the Terra just within the Van Allen radiation belts. The Van Allen belts protect Space Dock and other near-Terra-orbit objects from the intense radiation flux of Solar space. The close proximity to the denser players of Terra's atmosphere would normally cause the massive, city-sized station's orbit to decay eventually and it would enter the atmosphere. Such a huge object would survive re-entry to strike the ground as a molten fireball with great destructive potential. Thankfully, the light-year spanning power of anti-matter technology has provided massive impulse engines that easily maintain the station's close orbit. Space Dock circles the Terra once every 115 minutes.

The nearness of Space Dock to Terra's surface makes it readily accessible to transporter operations. Since transporters normally only have a range of 2,6000 kilometers, many circum-Terra stations are out of reach from the surface without the use of expensive, and sometimes tricky, relays. This applies to the many geo-synchronous satellites, the LaGrangian colonies, and especially to the stations on Luna herself. Space Dock was constructed to make use of Terran resources, while lying well within Terra's gravity well, thus saving tremendously on the energy expenditures for hauling those resources into orbit.



Space Dock was designed to provide the Sol Sector with a permanent base for the many vessels of Star Fleet Command. It can easily provide refit and repair facilities for up to 8 cruiser-sized starships and up to 24 of Star Fleet's lesser-sized vessels.

Although Space Dock is a vital link in Star Fleet Operations and it is administered by Starbase Headquarters Command, it is not actually a Starbase. Because it was intended primarily as a military installation, Space Dock was originally designed to be equipped with 40 massive phaser banks, but the Terran United Nations objected strenuously to the presence of more weapons in Terra orbit. Eventually a compromise was reached, and Space Dock was constructed weaponless, relying on high-powered deflectors for defensive purposes. Space Dock nonetheless retains its 40 weapon mounts, and, in case of interstellar war emergency, Star Fleet Command can mount phaser weapons and have them operational on Space Dock within a single week.

Another major and important purpose of Space Dock is its ability to scan all of Solar space. Space Dock has become one of the central installations for weather-watch, debris-scan, radiation-flux analysis, and starship traffic control, for Sol Sector. This has been made possible by the largest single array of sensor and subspace communications equipment in the known galaxy. A veritable forest of antennae bristle from the top of Space Dock, giving it the aspect of a major-city skyline. These antennae are so sensitive they can detect a meter-sized object in the Solar System's cometary halo, at least half a light-year away.

In addition to its military and traffic control functions, Space Dock has also become a commercial mecca for Sol Sector. Star Fleet leases office space, warehouse facilities, cargo transporters, and trade arbitration for many of the more important interstellar commercial corporations. With the convenience of its proximity to one of the most-populated planets in the Federation, it is no wonder that Space Dock is now the center for interstellar trade for the entire quadrant.

Because of its value as a trans-shipment point for both passengers and cargo, Space Dock has also developed a thriving tourist trade. Its kilometers of wide halls are now filled with shops, vendors, services, and restaurant facilities catering to a hundred races. Space Dock is now a regular link in the commercial spacelines that rivals the Rigel system as a source of revenue. What makes all of this even more remarkable is that this commercial aspect of Star Fleet's Repair and Service Facility has developed in the span of less than 5 years.

Space Dock also provides the most extensive medical facilities in near-Terra orbit, rivaling those of the LaGrangian colonies in their completeness and scope of operation. Because the gravity of Space Dock is entirely under the control of Star Fleet engineers at any point in the station, Space Dock's hospitals can be provided with any type of environment for any Federation race, and for many races outside of the Federation. The ongoing research being conducted here has begun to provide clues to the cures of many heretofore unsolvable medical mysteries.

Space Dock has become an auxiliary of Star Fleet Headquarters, based in San Francisco. The wide variety of Star Fleet operations conducted at Space Dock makes it an ideal training laboratory for Star Fleet Academy, and many

Cadets are getting their first space experience here. No matter what branch of service the Cadet may eventually enter, Space Dock provides, within its city-sized environment, experiences related to almost every facet of Star Fleet operations.

For example, engineering Cadets will gain much with exposure to the building-sized towers of the Facility's stabilizing impulse engine system and anti-matter reactors. And even this pales when compared with the chance to get hands-on experience with the construction of actual starships, not just some simulation in an Academy lab.

Because Star Fleet provides the security for Space Dock, this will give the young Cadet on-the-job training in one of the most important elements of Star Fleet security and also familiarizes the Star Fleet officer-to-be with the many different races that inhabit the UFP. Be it Science, Medicine, Astrogation, or Administration, Space Dock provides an ideal teaching experience for the persons who will eventually represent the Federation to new civilizations.

Space Dock's primary purpose as a Repair and Service Facility was implemented to replace Star Fleet's long reliance on its large, open-framework, service docks. The need to protect the ships and maintenance crews from the radiation flux of open space was made most acute when, during the refit of the *USS Challenger*, and unpredicted Solar flare sent high-energy radiation through the open dock, killing 37 space-suited workers before they could seek shelter within the partially dismantled heavy cruiser. To this end, Space Dock's vast main and auxiliary docking bays provide constant protection against gravitic, magnetic, and radioactive hazards of any nature. And of course, in the event of a very-high-flux incident, the station's deflector shields will automatically energize.

The bays, though not capable of pressurization, can direct any type of lighting anywhere within the bay, and a complex array of tractor and pressor beams normally provide any motive force needed to move the starships and material about or to moor them in place. Usually, the ships are docked against one of the huge service gantries jutting out from the central core of the station. The servicing of Star Fleet's mightiest mechanisms has become, in itself, a constant attraction for civilian and off-duty crewman alike. Many observation lounges line the faces of the service gantries, from which all aspects of repair and construction are immediately visible to the casual observer.

The most important project to be handled within Space Dock is the construction and testing of Star Fleet's first space battleship, The *NX-2000 USS Excelsior*. The *Excelsior* is fitted with the new Trans-Warp Drive and should become the flagship of a new series of Military Operations ships-of-the-line. The history of its construction, unmarred by accident or incident, is a testimony to the primary purpose of Space Dock.

CONSTRUCTION HISTORY

Stardate 1/9411

Space Dock is conceived during the beginning of the Four Years War as a base for starships to be maintained during a crises. The penetration by Klingons to Axanar is thought to be to near the center of Federation territory.

Stardate 1/9806

The Four Years War ends, due largely to Captain Garth's destruction of Klingon supply lines.

Stardate 1/9907

Plans for Space Dock are completed. Terra proposes to the United Federation of Planets that it should be funded and built in permanent Terra orbit. Terra feels that, even though the war has been won without the Klingons driving deeper towards the home worlds, were war to break out again, it should not risk the possibility of such penetration.

Stardate 2/0005

After months of massive lobbying by the Terran and associated member worlds, the UFP General Council approves the plans. Funds are budgeted to begin construction of Space Dock in 2/0501.

Stardate 2/0107

Due to a feeling of general well-being in the Federation, funding for Space Dock is cancelled.

Stardate 2/0801

The first shots of what would have been the Second Klingon War are stilled by the Organians, who impose the Organian Peace Treaty on both sides of the budding conflict.

Stardate 2/0911

Deep-cover agents within the Klingon Empire report that the Klingons and their long-time foes, the Romulans, have been quietly settling their border disputes for several months, sealing agreements with exchanges of military technology.

Stardate 2/0912

Funding is allocated once again to Space Dock after Star Fleet reveals the facts about the Romulan/Klingon non-aggression and technological exchange treaties. The UFP faces the fact that growing technological discoveries by the two empires could allow them to outstrip the UFP militarily in a short time.

Stardate 2/1106

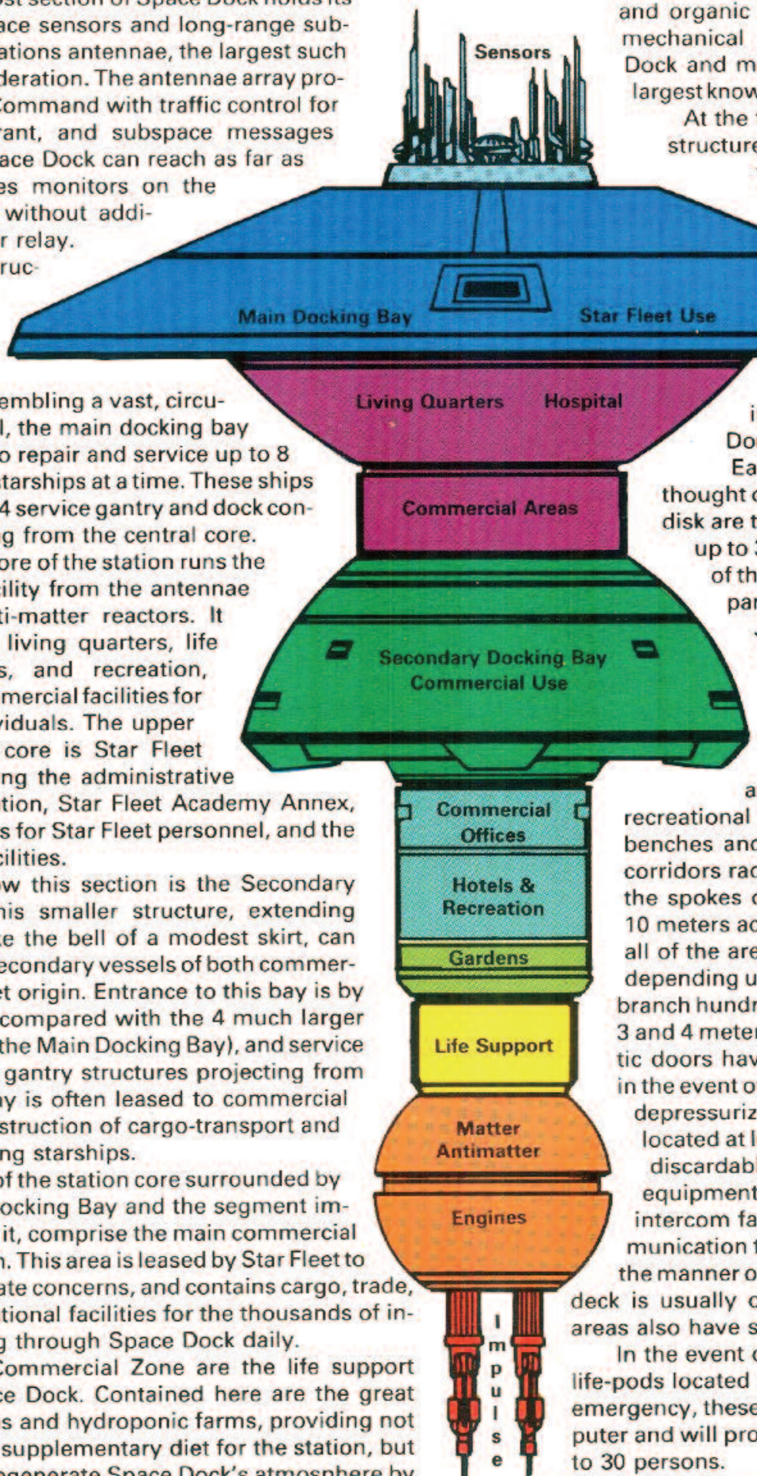
Construction finally begins in orbit above San Francisco and is expected to last 14 years. Terran concerns that Star Fleet is constructing a weapons platform in orbit are put to rest. Though Star Fleet wants weapons included in the construction because they feel it would offer more protection, Terra fears more weapons in permanent orbit.

Stardate 2/1704

The V'ger Incident accelerates the construction schedule. Feeling that such a permanent military base would be of benefit, Terra pours extra funding into the already far-over-budget project.

Stardate 2/2011

Space Dock enters full service, though it has been partially operational for some time. Much of Star Fleet's administrative services are moved there from San Francisco. Construction of the first Star Fleet battleship is begun in the newly-opened shipyard facilities.



The uppermost section of Space Dock holds its array of deep-space sensors and long-range subspace communications antennae, the largest such network in the Federation. The antennae array provides Star Fleet Command with traffic control for the entire quadrant, and subspace messages boosted from Space Dock can reach as far as the Epsilon series monitors on the Klingon borders without additional boosting or relay.

The largest structure of Space Dock is the 3600-meter-diameter main docking bay. Resembling a vast, circular, inverted bowl, the main docking bay is large enough to repair and service up to 8 *Enterprise* Class starships at a time. These ships are docked at the 4 service gantry and dock concourses projecting from the central core.

The central core of the station runs the length of the Facility from the antennae array to the anti-matter reactors. It contains offices, living quarters, life support systems, and recreation, hospital, and commercial facilities for over 50,000 individuals. The upper segment of the core is Star Fleet country, containing the administrative offices of the station, Star Fleet Academy Annex, the living quarters for Star Fleet personnel, and the main hospital facilities.

Directly below this section is the Secondary Docking Bay. This smaller structure, extending from the core like the bell of a modest skirt, can service up to 24 secondary vessels of both commercial and Star Fleet origin. Entrance to this bay is by 12 space-doors (compared with the 4 much larger ones supplied to the Main Docking Bay), and service is provided by 4 gantry structures projecting from the core. This bay is often leased to commercial firms for the construction of cargo-transport and passenger-carrying starships.

The section of the station core surrounded by the Secondary Docking Bay and the segment immediately below it, comprise the main commercial area of the station. This area is leased by Star Fleet to hundreds of private concerns, and contains cargo, trade, hotel, and recreational facilities for the thousands of individuals passing through Space Dock daily.

Below the Commercial Zone are the life support facilities of Space Dock. Contained here are the great botanical gardens and hydroponic farms, providing not only beauty and supplementary diet for the station, but also helping to regenerate Space Dock's atmosphere by natural photosynthesis. This area also provides a home for both commercial and Star Fleet research facilities.

The final core segment of the station is the Engineering Zone. In addition to providing Space Dock with inorganic and organic synthesis, Engineering maintains all mechanical and electronic operations of Space Dock and monitors the operation of the galaxy's largest known antimatter power generation system.

At the far end of Space Dock is the spherical structure housing the antimatter generators that provide all of the power required by the facility. At the very bottom of the sphere, there project the twin towers that contain the coolant radiators for the reactors and the mighty impulse drives that maintain Space Dock's stable near-Earth orbit.

Each deck of the central core may be thought of as a giant disk. Near the center of the disk are the main turbolifts, capable of carrying up to 30 persons at a time. At the very center of the core is the engineering access to any part of the station. This area is like one long Jeffries Tube, and contains electrical and plumbing lines. It is the spinal cord of the station, and allows physical access to every deck.

The turbolift area is surrounded by a main concourse, about 30 meters across. This area is used for the deck's recreational and rest facilities and often contains benches and artfully placed vegetation. Up to 24 corridors radiate out from the main concourse like the spokes of a wheel. Each of these corridors is 10 meters across and provides the major access to all of the areas of that deck. From these corridors, depending upon the purpose of the particular deck, branch hundreds of auxiliary corridors and hallways 3 and 4 meters across. At regular intervals, automatic doors have been installed; these will seal shut in the event of any section of Space Dock undergoing depressurization. Between each of these seals are located at least 4 emergency modules, containing discardable pressure suits and simple medical equipment. At each major junction there is an intercom facility providing visual and audio communication to any other part of the station, much in the manner of a pay phone booth. Transport within a deck is usually on foot, but some of the commercial areas also have slidewalks and short turbolift shafts.

In the event of a catastrophic emergency, there are life-pods located along the rim of each deck. In such an emergency, these pods are unlocked by the central computer and will provide one-way atmosphere entry for up to 30 persons.

GAMING INFORMATION

It is particularly difficult to give precise game information for such a large structure. It will help the gamemaster and players to think of Space Dock as a typical port city, such as San Francisco, New York, or, perhaps more appropriately, Pearl Harbor. It will have a wide variety of facilities ranging from typical military operations down to subrosa dealings between commercial operators. The size and complexity of Space Dock would seem to assure that it would have complete shore leave operations, including some of the more traditional naval types, like gambling, drinking, and 'recreational' pursuits.

Because Space Dock is under the directly control of Star Fleet Command Headquarters, however, the gamemaster should try to avoid having seedy cantinas or slum dwelling of any type. For one thing, Space Dock hasn't been in operation long enough to gain such things, and for another, its closed environment would tend to make such things obvious to Star Fleet Administration and would be curtailed immediately.

Because Space Dock is also a commercial facility, there is much potential for scenarios involving non-military adventures, industrial espionage, exotic trade, and smuggling. Remember that the corridors of Space Dock are patrolled by Star Fleet Security, armed with phaser weapons.

When constructing scenarios involving Space Dock some elements of its internal construction should be kept in mind.

For game data on Space Dock, refer to ***STAR TREK III* Sourcebook Update**, available from FASA.

SCENARIO IDEAS

The Hit Team

The player characters are part of Star Fleet Security onboard Space Dock. They have received a reliable tip that Orions, surgically altered to appear as Terrans, are going to attempt to assassinate the Catullan ambassador at tonight's reception on the Main Docking Bay Observation Deck. The murder of the Catullan ambassador will surely bring to a halt the ongoing talks concerning the use of the so-called Genesis device. The only clue they have to the identity of the Orions is that they are disguised as food-service personnel. Because the reception is being catered by a staff of over 100, this will make things difficult. Also, it would be a diplomatic gaffe to allow an embassy to know that Space Dock's security may have been penetrated.

Little Lost Girl

The player characters are is part of Star Fleet Security. Space Dock is 4.7 kilometers in length and 3.8 kilometers in diameter, with well over 50,000 souls on board. A tearful mother calls Security to explain that her daughter has become lost. The duty officer starts to make reassurances to mother about how Star Fleet's finest will find her little girl in no time, when she tearfully explains that her little Bet-tan, is only 5 years old, speaks no Galacta, and has a rare blood disease that requires medication on a daily basis. This is bad, but when the mother is giving you the particulars, she reveals that she is part of a Vendorian embassy to Terra. Vendorians are shape changers, capable of taking any shape they wish. The Federation has allowed this one embassy to come to Terra to see if it will be possible to finally break the quarantine that has been placed on the Vendorians. The woman assumes her natural appearance before the video monitor and the player characters can see that she is actually a tall, purple, many-tentacled creature with clusters of eyes. "You must find Bet-tan," she sobs, "I last saw her near the recreational facilities." The duty officer signals his your crack security officers (the player characters) as soon as he signs off. This one's going to be hard.

"Have I Got A Deal For You"

The player characters crew a private long-range scout, and they have finally made it back to Terra for the first time in years. They park their ship in the Secondary Docking Bay of Space Dock and enter the station to make their fortune with the goods they have accumulated from around the Galaxy. Then they find, much to their dismay, that much of what they have brought in is contraband.

Who would have thought that a little Tribble would be considered harmful? Or that Polaris Scent Crystals would be listed as a banned drug? Oh well, easy come, easy go. Meanwhile, they have docking fees to be paid, a ship to refuel, and Terran Customs Officials to evade.

For this scenario, the characters' objective is to sell enough material in Space Dock to reservice their ship and get away into warp drive before they are caught by the authorities. In the meantime, they will have to face possible underworld concerns, hijacking of their cargo, and the ever watchful officers of Star Fleet Security. Care to buy some Spican Flame Gems?

MAJOR WORLDS OF THE FEDERATION

Although this book cannot catalog every planet within Federation space, certain worlds have a special significance and should be examined in closer detail. The following section provides information on the 100 planets constituting the major cultural, economic, and political centers in the Federation. The following world logs also illustrate the wide variety of cultural and racial differences existing within the 4,000,000 square parsecs of space controlled by the United Federation of Planets.

World Log: ALBIREO	
System Data	
System Name:	Beta Cygni
Map Coordinates:	3.27N 1.97W
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	.85g
Planetary Size	
Diameter:	17,000 km
Equatorial Circumference:	52,000 km
Total Surface Area:	620,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	248,000,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	60%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	787455–77
Planetary Trade Profile:	CCDBECC/C (C)

Albireo is the second in a six-planet triple-star system. The Federation colony on this world was established toward the end of the last century. The high levels of solar radiation generated by the suns create a wide range of climactic conditions on Albireo.

As the weather made it almost impossible to farm, the colonists manufactured synthetic foodstuffs to support the planet's two billion people. After food productivity increased, the world began exporting their synthetic foodstuffs, which eventually became the principle economic staple of the planet.

Albireo is noted for its beautiful aurora displays at the end of each winter season, which draw tourists from all parts of the Federation.

World Log: ALDEBARAN	
System Data	
System Name:	Alpha Tauri
Map Coordinates:	2.01S 2.01E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	6
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	15,500 km
Equatorial Circumference:	49,000 km
Total Surface Area:	575,000,000 sq km
Percent Land Mass:	30%
Total Land Area:	172,500,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	10%
Gemstones:	25%
Industrial Crystals:	20%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	778998–76
Planetary Trade Profile:	BCBACBC/B(B)

Aldebaran is a major Federation port and administrative and supply center. Beyond this, it is also noted for its many floral varieties and unspoiled wilderness. A very popular tourist attraction and vacation spot, Aldebaran boasts a wide variety of exotic foods and wines found nowhere else in the galaxy. After Arcturus, it is the largest center of corporate holdings outside the original boundaries of the Federation.

World Log: ALFA 177	
System Data	
System Name:	Alpha Honorus
Map Coordinates:	3.51S 5.26W
Number Of Class M Present:	1
Planetary Data	
Position In System:	2
Number Of Satellites:	1
Planetary Gravity:	.95g
Planetary Size	
Diameter:	17,500,000 km
Equatorial Circumference:	46,000 km
Total Surface Area:	480,000,000 sq km
Percent Land Mass	90%
Total Land Area:	432,000,000 sq km
Planetary Conditions	
Length Of Day:	37 hrs
Atmospheric Density:	Thin
General Climate:	Cold Temperate
Mineral Content	
Normal Metals:	70%
Radioactives:	05%
Gemstones:	05%
Industrial Crystals:	Trace
Special Minerals:	Trace

A marginal Class M planet, Alfa 177's thin atmosphere and distance from its parent sun drop temperatures below –107° C. at night. Despite this hazard, various life-forms have managed to evolve on the planet. In particular, a species of horned canine has adapted especially well to its climate. Alfa 177 is also noted for its rare mineral ores, which contain unusual magnetic properties. Such ores have an adverse effect on transporter operations, and caution should be observed when beaming to or from this planet.

World Log: ALPHA III	
System Data	
System Name:	Alpha Canaris
Map Coordinates:	0.93N 1.62W
Number Of Class M Present:	2
Planetary Data	
Position In System:	4
Number Of Satellites:	7
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	36,800 km
Total Surface Area:	370,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	148,000,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	70%
Radioactives:	20%
Gemstones:	05%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	885753–88
Planetary Trade Profile:	BCBDBBC/C (B)

Colonized in Terra's 22nd century as Terra Four, Alpha III is now one of the major cultural and administrative centers of the Federation, and one of the seven members of the Federation Security Council. Alpha III is noted in Federation history as the birthplace of the famous *Statutes of Alpha III*, considered one of the most important political documents ever written. These statutes created a republic based on the ancient Terran Platonic system, and have served as a model for other political systems ever since.

World Log: ALPHA MAJORIS II	
System Data	
System Name:	Alpha Majoris
Map Coordinates:	2.82N 0.97W
Number Of Class M Present:	2
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	.7g
Planetary Size	
Diameter:	15,000 km
Equatorial Circumference:	38,000 km
Total Surface Area:	478,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	191,200,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	50%
Radioactives:	10%
Gemstones:	25%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	787785–77
Planetary Trade Profile:	CDDDCDD/C(D)

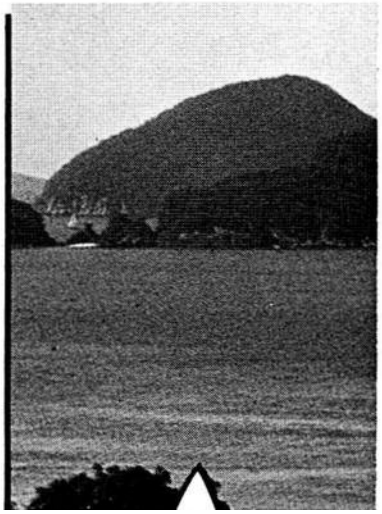
One of two planets orbiting a red giant sun, Alpha Majoris II was settled by a Human colonial team shortly after the Federation was formed. It is the home of the Mellitus creature, a semi-intelligent plasma-based creature discovered in Stardate 2/15. (This peaceful creature should not be confused with the vampire-like cloud creature of the Tycho system.) Alpha Majoris II is also famous for its many rare and beautiful gems prized throughout the galaxy for their purity and elegance.

World Log: ALPHA PROXIMA II	
System Data	
System Name:	Dnoces
Map Coordinates:	0.21S 2.49W
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	7
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	21,000 km
Equatorial Circumference:	53,000 km
Total Surface Area:	520,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	312,000,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Thick
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	40%
Radioactives:	30%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	8887886–97
Planetary Trade Profile:	BBAABCC/B(B)

Alpha Proxima was one of the first Human out-system colonies. Major local industries include radioactives mining and widespread agriculture. Alpha Proxima also claims one of the largest sea-farming concerns in the Federation. Over 180,000 square kilometers are used for off-shore foodstuffs production.

World Log: ALPHA CENTAURI	
System Data	
System Name:	Al Rijil
Map Coordinates:	1.27N 2.92W
Number Of Class M Present:	3
Planetary Data	
Position In System:	VII
Number Of Satellites:	2
Planetary Gravity:	.86g
Planetary Size	
Diameter:	18,000 km
Equatorial Circumference:	22,000 km
Total Surface Area:	425,000,000 sq km
Percent Land Mass:	30%
Total Land Area:	127,500,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	60%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Alpha Centauri
Technological/ Sociopolitical Index:	999998–98
Planetary Trade Profile:	AABAABB/A(B)

Al Rijil is a triple-star system that supports life on its fourth, fifth, and seventh planets. The first two are colonies of Alpha Centauri proper. The considerable similarities between Humans and Alpha Centaurans have led some exobiologists to suggest that the latter may be Humans transplanted from Terra around the third century B.C., although this has never been proven. Alpha Centauri was the home of Zephram Cochrane, the inventor of the warp drive. Currently, it ranks as one of the major cultural and scientific centers in the Federation, second only to Terra. One of the five founding members of the Federation, Alpha Centauri also has permanent representation on the Federation Council. This lush tropical world presently supports a population of 20 billion inhabitants.



World Log: ALTAIR	
System Data	
System Name:	Alpha Aquilae
Map Coordinates:	3.02N 0.99E
Number Of Class M Present:	2
Planetary Data	
Position In System:	VI
Number Of Satellites:	2
Planetary Gravity:	1.5g
Planetary Size	
Diameter:	20,500 km
Equatorial Circumference:	24,000 km
Total Surface Area:	520,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	312,000,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	65%
Radioactives:	15%
Gemstones:	05%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	677857–77
Planetary Trade Profile:	BCCBDBC/B(C)

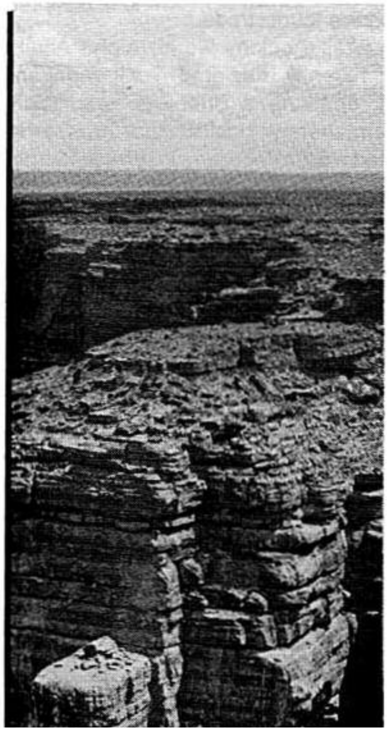
Humans currently inhabit two Class M planets in the Alpha Aquilae system. Relics on Altair show the existence of an ancient civilization that pre-dates Human occupation of the planet. Some believe these ruins may belong to the Preservers' culture, while others suggest a connection to the Vegan Tyranny. Current archeological evidence is inconclusive. Altair is also known for the medicinal properties of its mineral-rich waters. Millions of Federation citizens come to Altair each year to 'take the waters', which has created a lucrative tourist trade.

Altair's colony world, Alpha Aquilae IV, recently declared itself independent, sparking a brief but inconclusive interplanetary conflict that was terminated by Federation peace-keeping forces. The government on Altair currently governs both worlds while a Federation diplomatic team attempts to negotiate a resolution to the political crisis.

World Log: AMBER

System Data	
System Name:	Beta Rigalia
Map Coordinates:	6.05N 0.27E
Number Of Class M Present:	1
Planetary Data	
Position In System:	V
Number Of Satellites:	3
Planetary Gravity:	0.78g
Planetary Size	
Diameter:	12,500 km
Equatorial Circumference:	22,250 km
Total Surface Area:	275,000,000 sq km
Percent Land Mass:	44%
Total Land Area:	121,000,000 sq km
Planetary Conditions	
Length Of Day:	21 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Alpha Centauri
Technological/ Sociopolitical Index:	676666-66
Planetary Trade Profile:	CCDDCDE/C(C)

This pleasant world was named for the distinctive color of its sunsets, due to its cooler, Type K sun. Amber is important as a major supplier of hybrid grains to many portions of the Federation. Though not extensively mined, the planet has many easily accessible copper deposits, making it a valuable trading center. Amberites permit offworlders to mine copper in exchange for offworld goods and services. A Star Fleet cadet training center is also located here.



World Log: AMERIND

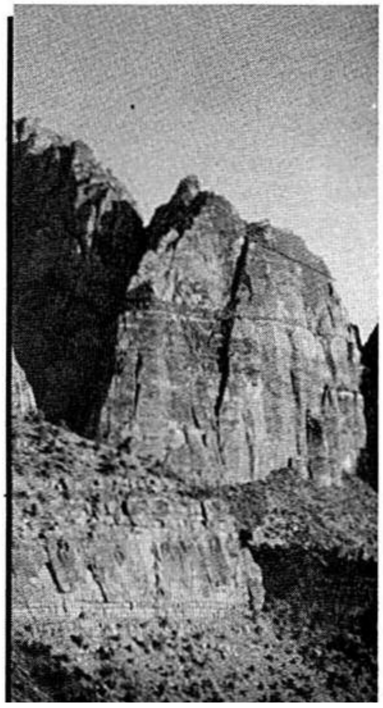
System Data	
System Name:	Epsilon Beta
Map Coordinates:	5.78N 4.52E
Number Of Class M Present:	1
Planetary Data	
Position In System:	2
Number Of Satellites:	0
Planetary Gravity:	1.05g
Planetary Size	
Diameter:	14,250 km
Equatorial Circumference:	18,750 km
Total Surface Area:	285,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	142,500,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	Trace
Gemstones:	15%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Amerind
Technological/ Sociopolitical Index:	343342-43
Planetary Trade Profile:	None

A Federation protectorate under the Prime Directive, the Amerind culture appears to have been planted here several thousand years ago by the mysterious Preservers. The presence of a modern, automated deflector system on the planet as well as the near-perfect similarity between the Amerinds and ancient Terra's North American Indians support this fact. When last contacted, the Amerinds were in an early tribal stage, peaceful and prosperous, though not overly developed culturally. The Federation is planning to send a cultural observation team to the planet in the near future.

World Log: ANCHOR

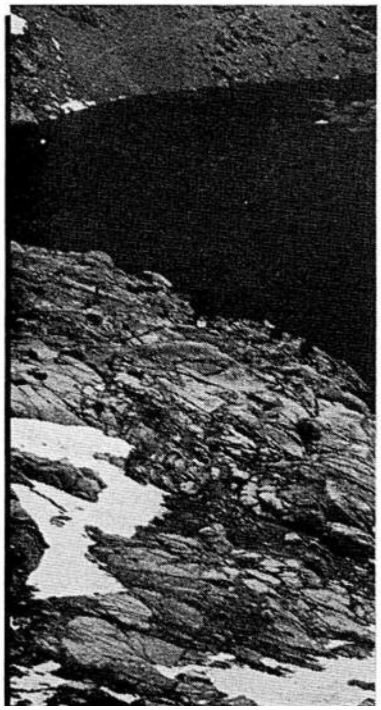
System Data	
System Name:	Beta Hydra 378
Map Coordinates:	5.90N 3.27E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	0.97g
Planetary Size	
Diameter:	8,900 km
Equatorial Circumference:	12,200 km
Total Surface Area:	279,000,000 sq km
Percent Land Mass:	55%
Total Land Area:	153,450,000 sq km
Planetary Conditions	
Length Of Day:	23 hours
Atmospheric Density:	Thick
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	44%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Tellarite
Technological/ Sociopolitical Index:	776566-74
Planetary Trade Profile:	CCDCECC/B(C)

Envisioned as a major mining/ supply point between Federation worlds and colonial settlements, Anchor has been passed by as the Federation turns its attention to more strategic regions of space. Anchorites subsist in a modest feudal system, although several southern cities continue to trade locally produced glass and pottery with other systems. Within the last decade, Star Fleet has built a repair facility in orbit around the planet, and many trust that the influx of Star Fleet personnel will revive the planet's industy.



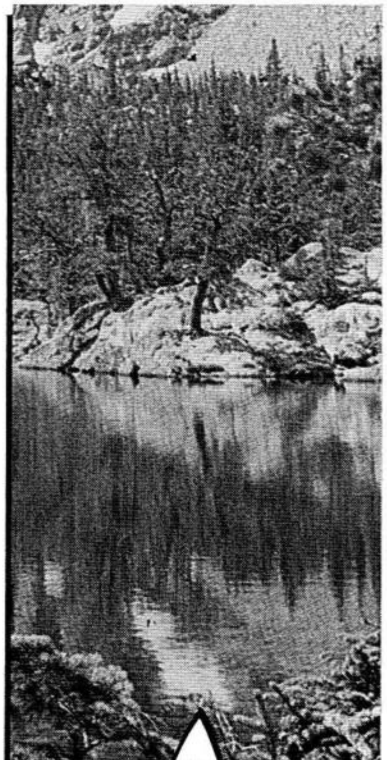
World Log: ANDOR	
System Data	
System Name:	Epsilon Indi
Map Coordinates:	1.82N 2.22W
Number Of Class M Present:	2
Planetary Data	
Position In System:	VIII
Number Of Satellites:	3
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	18,000 km
Equatorial Circumference:	24,000 km
Total Surface Area:	470,000,000 sq km
Percent Land Mass:	80%
Total Land Area:	316,000,000 sq km
Planetary Conditions	
Length Of Day:	21 hrs
Atmospheric Density:	Thin
General Climate:	Cold
Mineral Content	
Normal Metals:	40%
Radioactives:	20%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Andorian
Technological/ Sociopolitical Index:	999997–88
Planetary Trade Profile:	AFGEABE/D(C)

The home of a race of blue-skinned Humanoids, Andor was one of the founding members of the Federation. Andorians are quickly distinguished by their natural skin coloring and their antennae, which act as an additional sense organ. They are known for their aggressiveness, though this tendency is often over-exaggerated. Andor currently has a population of over 20 million inhabitants. As one of the most advanced races in the Federation, Andorians maintain a permanent seat on the Federation Council.



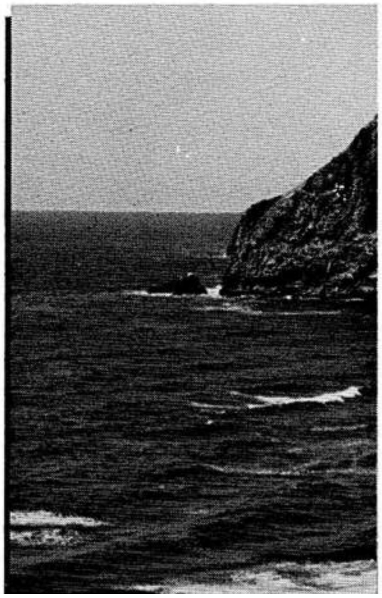
World Log: ANTARES	
System Data	
System Name:	Alpha Scorpii
Map Coordinates:	2.02N 1.79E
Number Of Class M Present:	1
Planetary Data	
Position In System:	2
Number Of Satellites:	3
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	17,500 km
Total Surface Area:	305,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	152,500,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	30%
Radioactives:	10%
Gemstones:	30%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	888887–77
Planetary Trade Profile:	AABBAAB/A(B)

The largest interstellar trade center outside the Rigel system, Antares is the commercial and financial capital of the Federation. This is due in large part to Antares' central location and to the cultural predominance of Antaren business scientists. Many say that if a commodity exists anywhere in the galaxy, one can find it on Antares. With the exception of slave trade, Antares has no port-of-call restrictions regarding the nature of goods imported to the planet.



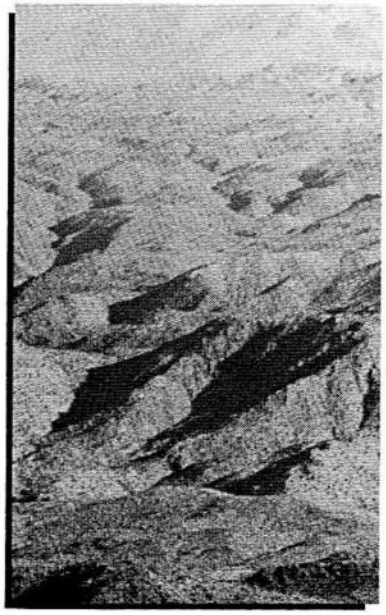
World Log: ANTOS	
System Data	
System Name:	Socratii
Map Coordinates:	2.99S 4.12E
Number Of Class M Present:	1
Planetary Data	
Position In System:	7
Number Of Satellites:	5
Planetary Gravity:	0.9g
Planetary Size	
Diameter:	8,750 km
Equatorial Circumference:	14,500 km
Total Surface Area:	280,200,000 sq km
Percent Land Mass:	30%
Total Land Area:	84,060,000 sq km
Planetary Conditions	
Length Of Day:	18 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	60%
Radioactives:	Trace
Gemstones:	20%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Antosian
Technological/ Sociopolitical Index:	667685–67
Planetary Trade Profile:	None

A humanoid race discovered shortly before the Romulan War, the Antosians are a peaceful race with no interest in affairs outside their own world. Having declined formal membership in the Federation, they nevertheless retain peaceful relations with their interstellar neighbors. Native Antosians have learned cellular metamorphosis, allowing them to alter their physical appearance while maintaining their general shape and mass. This has been a well-kept secret among the Antosians for centuries. They have shared this knowledge only with Captain Kelvar Garth of Izar, in an effort to save his life after a deep-space accident left him horribly burned and disfigured.



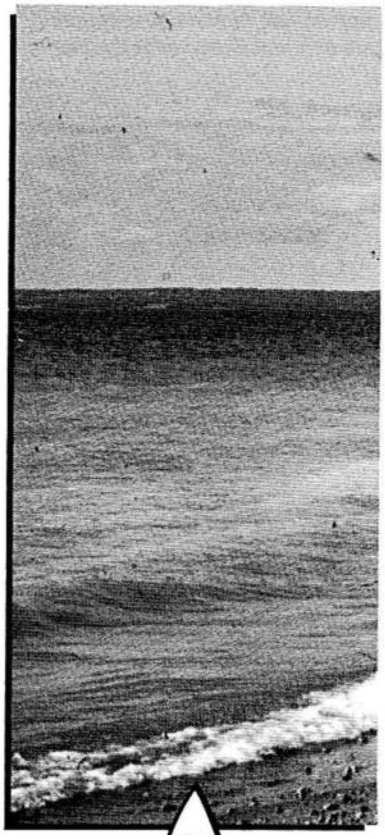
World Log: APLITHIN	
System Data	
System Name:	Arcanis Majoris
Map Coordinates:	7.16S 2.40W
Number Of Class M Present:	None
Planetary Data	
Position In System:	4
Number Of Satellites:	2
Planetary Gravity:	.70g
Planetary Size	
Diameter:	8,245 km
Equatorial Circumference:	13,470 sq km
Total Surface Area:	285,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	114,000,000 sq km
Planetary Conditions	
Length Of Day:	17 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	30%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Arcanian
Technological/ Sociopolitical Index:	776783–66
Planetary Trade Profile:	BBDCDCC/C(C)

Lying near the Organian Neutral Zone, Aplithin is one of the more distant members of the Federation. This class K planet is noteworthy as the home of an intelligent species of avians, bipedal creatures standing about two-and-a-half meters tall with a feathery wingspan of over five meters. The world's low gravity and tenuous atmosphere give the inhabitants the power of controlled flight. Not surprisingly, Aplithinian cultural centers are located in the mountain ranges of the northern hemisphere. Since their contact with the Federation over a century ago, Aplithin has become a full UFP member and supports a large Federation research installation.



World Log: ARCTURUS	
System Data	
System Name:	Alpha Bootis
Map Coordinates:	1.48S 0.39E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	7
Planetary Gravity:	.78g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	17,300 km
Total Surface Area:	320,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	192,000,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temporate
Mineral Content	
Normal Metals:	40%
Radioactives:	10%
Gemstones:	20%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	776877–67
Planetary Trade Profile:	AABACBB/B(B)

A major cultural and commercial center, Arcturus maintains a Human culture comparable to that of Terra's Elizabethan England. The Arcturans are very influential among Federation members, many of whom have adopted their mode of dress and cultural styles. Arcturus currently has a representative on the Federation Council.



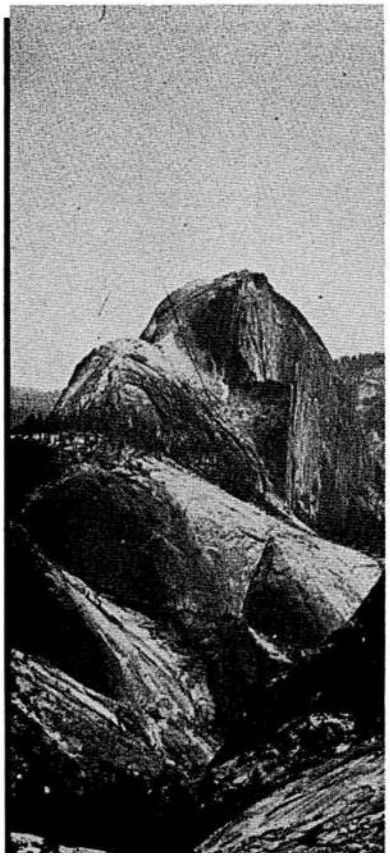
World Log: ARDANA	
System Data	
System Name:	Mu Leonis
Map Coordinates:	0.98N 6.12E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	1
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	16,400 km
Total Surface Area:	310,000,000 sq km
Percent Land Mass:	80%
Total Land Area:	248,000,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	30%
Cultural Data	
Dominant Life Form:	Ardani
Technological/ Sociopolitical Index:	767878–88
Planetary Trade Profile:	BAABCBC/C(D)

One of the newest Federation members, Ardana supports a humanoid culture split between two social classes: the ground-dwelling troglytes, who serve as cavern-miners, and the more culturally advanced inhabitants of the anti-gravity city Stratos, literally a city in the clouds. Stratos supports approximately 700,000 inhabitants, although an accurate census of the troglytes has never been taken. Ardana is important not only for its many cultural and artistic achievements, but also for its extensive subterranean zienite mines. Social differences between the social orders are being eliminated as a result of a Federation Council resolution.

World Log: ARGELIUS II

System Data	
System Name:	Argelius
Map Coordinates:	5.18S 1.97E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	11,500 km
Equatorial Circumference:	17,500 km
Total Surface Area:	310,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	155,000,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	60%
Radioactives:	Trace
Gemstones:	20%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Argelian
Technological/ Sociopolitical Index:	888788–76
Planetary Trade Profile:	AABCBCB/A(B)

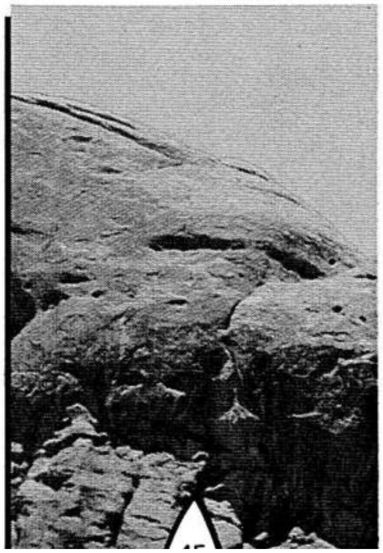
A major port facility, Argelius is a cultural and artistic nexus renowned for the friendliness and hospitality of its people. Since their Great Awakening two centuries ago, the Argelians have adopted a totally pacifistic social order, deploring all forms of violence. The current population of Argelius is about two billion.



World Log: AVALON

System Data	
System Name:	Ceberhardt
Map Coordinates:	3.25N 3.25W
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	2
Planetary Gravity:	1.05g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	17,250 km
Total Surface Area:	315,600,000 sq km
Percent Land Mass:	70%
Total Land Area:	220,092,00 sq km
Planetary Conditions	
Length Of Day:	25
Atmospheric Density:	Terrestrial
General Climate:	Controlled Terrestrial
Mineral Content	
Normal Metals:	70%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	542453–34
Planetary Trade Profile:	DDDCEED/A(B)

The first planet outside the Sol system to be terraformed by Humans, Avalon was settled by several thousand Humans who wished to return to ancient Terran codes of chivalry and feudal society. Adopting the name of a mythical habitation on Earth, the original settlers adapted the ancient feudal customs and privileges of their ancestors. Avalon retains this quixotic ideal to the present day, remaining over 80 percent feudal-agricultural. However, the recent construction and leasing of a Star Fleet support facility on Avalon has introduced a limited amount of industrial and technological potential to this world. The current population of the planet numbers over one billion inhabitants, with over two million in the capital city of Camelot.



World Log: AXANAR

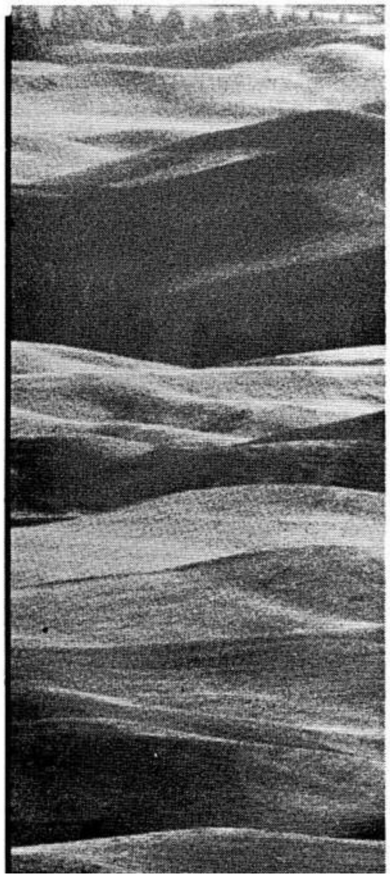
System Data	
System Name:	Delta Orcus
Map Coordinates:	2.46S 0.47W
Number Of Class M Present:	1
Planetary Data	
Position In System:	I
Number Of Satellites:	0
Planetary Gravity:	1.12g
Planetary Size	
Diameter:	14,330 km
Equatorial Circumference:	50,420 km
Total Surface Area:	645,124,000 sq km
Percent Land Mass:	11%
Total Land Area:	70,963,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	10%
Radioactives:	9%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	12%
Cultural Data	
Dominant Life Form:	Axanorian
Technological/ Sociopolitical Index:	677663–46
Planetary Trade Profile:	DDBFEEE/D(D)

A planet containing an intelligent though primitive Humanoid race, Axanar was the scene of the first engagements of the Four Years War. In Stardate 1/9408, Captain Kelvar Garth of Izar led a Federation squadron against a Klingon task force to prevent the Klingons from maintaining their foothold on the planet. Later, he commanded the forces that sieged the planetary system and defeated the Klingon forces on Axanar. Following the war, Axanar became a Federation Protectorate, and still maintains a Cultural Observation Mission to mend the harm that the Klingons caused the local inhabitants.

World Log: BABEL

System Data	
System Name:	Wolf 424
Map Coordinates:	3.98S 3.18E
Number Of Class M Present:	1
Planetary Data	
Position In System:	XII
Number Of Satellites:	8
Planetary Gravity:	.77g
Planetary Size	
Diameter:	8700 km
Equatorial Circumference:	12,500 km
Total Surface Area:	280,000,000 sq km
Percent Land Mass:	90%
Total Land Area:	252,000,000 sq km
Planetary Conditions	
Length Of Day:	18 hrs
Atmospheric Density:	Thin
General Climate:	Cold Arid
Mineral Content	
Normal Metals:	80%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace

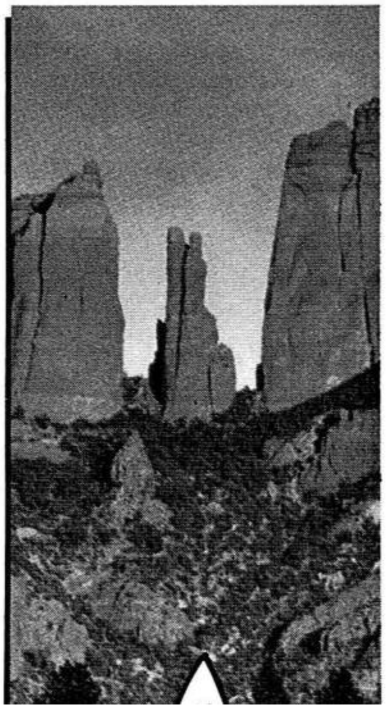
An otherwise barren and unimportant planetoid, Babel has been the site of many major Federation conferences, beginning with the signing of the Articles of Federation. Terraformed for Humanoid habitation, Babel has added a major library and cultural support center to its conference facilities.



World Log: BARRONY

System Data	
System Name:	Zeta Hydra 281
Map Coordinates:	4.77N 2.92E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	2
Planetary Gravity:	0.89g
Planetary Size	
Diameter:	12,700 km
Equatorial Circumference:	17,700 km
Total Surface Area:	285,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	142,500,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	30%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	40% Human 60% Other
Technological/ Sociopolitical Index:	888887–98
Planetary Trade Profile:	CCDCDDC/C(D)

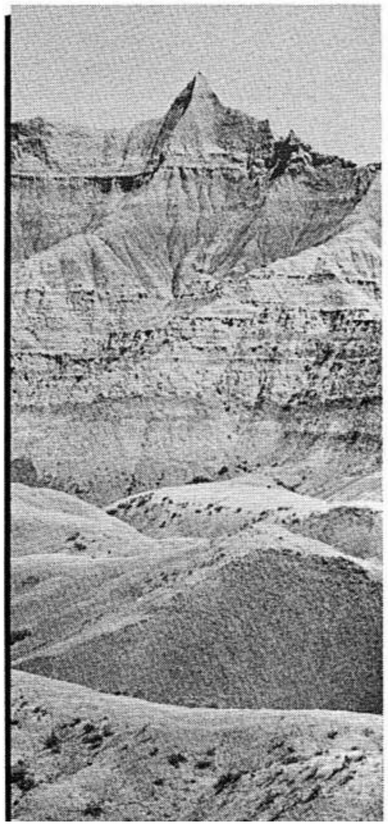
Barrony was the home planet of the late Maximus O'Connor until he purchased the planet Laura's World. It is currently the private abode of O'Connor's heir, who has made the planet a safe haven for escaped Orion slaves and other individuals seeking political sanctuary. Through an arrangement with Star Fleet Command, portions of Barrony are leased to Star Fleet for commercial and military use. Only those with Security Clearance 5 or higher know what price Star Fleet pays in exhange.



World Log: BARSOOM

System Data	
System Name:	Delta Gamma
Map Coordinates:	1.01N 5.79W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	5
Planetary Gravity:	1.25g
Planetary Size	
Diameter:	9,000 km
Equatorial Circumference:	14,800 km
Total Surface Area:	300,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	180,000,000 sq km
Planetary Conditions	
Length Of Day:	19 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	20%
Radioactives:	10%
Gemstones:	30%
Industrial Crystals:	20%
Special Minerals:	20%
Cultural Data	
Dominant Life Form:	75% Tellarite 25% Human
Technological/ Sociopolitical Index:	767688–68
Planetary Trade Profile:	BBBCBBB/B(C)

Barsoom is a geologist's dream, having an abundance of different precious metals and ores. Colonized over 100 years ago by both Human and Tellarite settlers, Barsoom has become one of the richest mining and industrial worlds in the Federation. The planet also maintains the largest Tellarite population (over 5 million inhabitants) outside the Tellar homeworld system.



World Log: BENECIA

System Data	
System Name:	Delta Majoris
Map Coordinates:	1.01S 2.01E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	12
Planetary Gravity:	.98g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	15,700 km
Total Surface Area:	308,000,000 sq km
Percent Land Mass:	70%
Total Land Area:	215,600,000 sq km
Planetary Conditions	
Length Of Day:	23 hrs
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	70%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	65% Alpha Centauri 35% Human
Technological/ Sociopolitical Index:	876666–88
Planetary Trade Profile:	BCCCDDD/C(D)

Founded after the Romulan War by a joint Human-Alpha Centauri colonial mission, Benecia remains a vast wilderness planet, only one-quarter of which has ever been explored. Local industries include forestry and processing native raw minerals. The local inhabitants have resisted the importation of excessive technology, with an eye toward disturbing the local environment as little as possible. Benecia was also the home of the Back-to-Earth movement, which had a widespread following until it collapsed after the second Babel Conference. Current Benecian population is less than 25,000.

World Log: BETA III

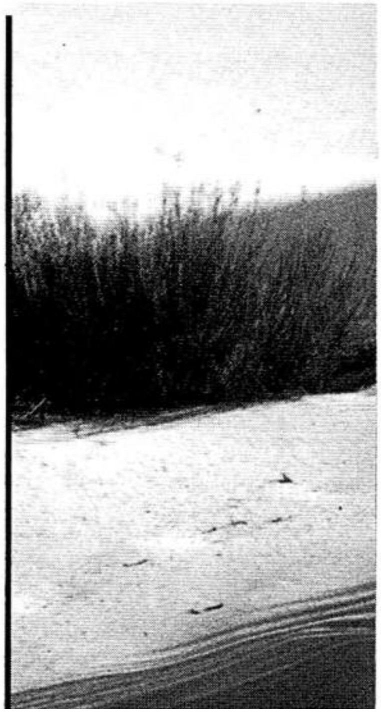
System Data	
System Name:	6-11
Map Coordinates:	6.18S 4.82W
Number Of Class M Present:	1
Planetary Data	
Position In System:	VI
Number Of Satellites:	2
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	9,700 km
Equatorial Circumference:	18,000 km
Total Surface Area:	265,000,000 sq km
Percent Land Mass:	42%
Total Land Area:	111,300,000 sq km
Planetary Conditions	
Length Of Day:	24 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	35%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Landrusian
Technological/ Sociopolitical Index:	455552–77
Planetary Trade Profile:	CCDCCDD/D(D)

Beta III's advanced Humanoid civilization was managed for several hundred years by a massive central computer complex built by the planet's leading philosopher/scientist Landru. When an investigation team from the *USS Enterprise* discovered the social stagnation produced by this computer, they induced the master computer to self-destruct to free the planet's populace. Since that time, the civilization has returned to a normal path of social evolution and is currently an associate member of the Federation.

World Log: BLACKART

System Data	
System Name:	Alpha Vergoris
Map Coordinates:	6.27N 3.52E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VIII
Number Of Satellites:	3
Planetary Gravity:	.87g
Planetary Size	
Diameter:	19,700 km
Equatorial Circumference:	59,500 km
Total Surface Area:	725,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	290,000,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Thin
General Climate:	Arid
Mineral Content	
Normal Metals:	10%
Radioactives:	15%
Gemstones:	10%
Industrial Crystals:	25%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Tellarite
Technological/ Sociopolitical Index:	889973–58
Planetary Trade Profile:	BCEDCEC/C(C)

A major Tellarite mining concern, Blackart is a planet rich in natural resources. It is also suspected of being one of the largest black market centers in the galaxy. Control of the planet is currently in dispute, due to various corporate rivalries. There are even unconfirmed reports that wealthy industrialists on Blackart maintain Orion female slaves. The Federation regional courts are taking the matter seriously, and are considering using Star Fleet resources to inspect all incoming and outgoing traffic in the Alpha Vergoris system.



World Log: BONANZA

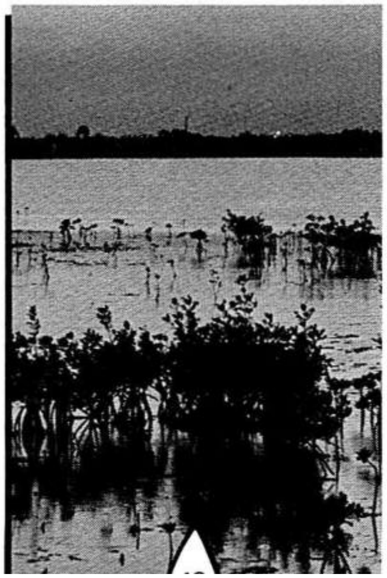
System Data	
System Name:	Aegis Aquilia
Map Coordinates:	4.45N 4.47W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	2
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	7,800 km
Equatorial Circumference:	12,850 km
Total Surface Area:	225,000,000 sq km
Percent Land Mass:	95%
Total Land Area:	213,750,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Thin
General Climate:	Arctic
Mineral Content	
Normal Metals:	42%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	45%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	40% Human 40% Tellarite 10% Vulcan
Technological/ Sociopolitical Index:	778887–78
Planetary Trade Profile:	BBCDCCD/D(D)

A frigid icy rock, inhospitable and virtually featureless, Bonanza is an important planet due to the planet's considerable sub-surface gold and diamond deposits. With a large population of offworld miners living under pressurized domes, Bonanza has steadily increased in value since its discovery two decades ago. Geologists estimate that the gold and diamond reserves will not be depleted for at least another century. Star Fleet maintains a small orbital defense installation supporting large monitors and numerous corvettes to guard the system from unauthorized intrusion.

World Log: CAIT

System Data	
System Name:	Caitia
Map Coordinates:	1.80N 2.16E
Number Of Class M Present:	1
Planetary Data	
Position In System:	4
Number Of Satellites:	2
Planetary Gravity:	1.25
Planetary Size	
Diameter:	10,100 km
Equatorial Circumference:	17,200 km
Total Surface Area:	311,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	155,000,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Thick
General Climate:	Warm Tropical
Mineral Content	
Normal Metals:	40%
Radioactives:	20%
Gemstones:	20%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Caitians
Technological/ Sociopolitical Index:	887865–76
Planetary Trade Profile:	BEFCDEG/B(C)

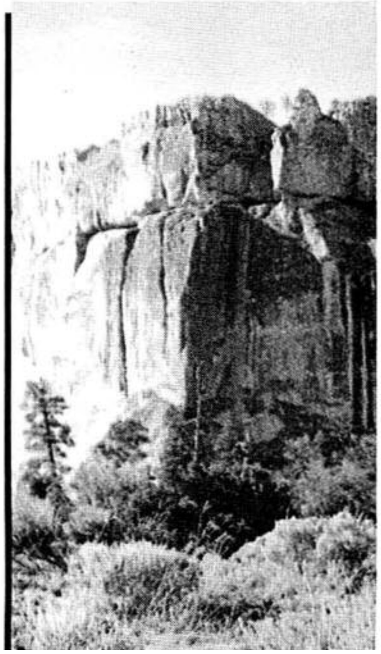
Cait is a lush, tropical world, whose race of intelligent felinoids is among the newest races to join the Federation. Resembling Terran felines, Caitians are thick-furred beings, light gold to dark brown in color. When first contacted, the Caitian civilization was considerably advanced, with an emphasis in the physical and biomedical sciences, even though Caitians had never ventured beyond their own planet. Despite their predatory appearance, Caitians are extremely peaceful and have strong individual and group loyalties. Cait maintains a large starship construction facility capable of producing a wide range of military and commercial craft each year. The planet is currently represented in the Federation Council.



World Log: CALANARA

System Data	
System Name:	Beta Leonis
Map Coordinates:	2.95N 0.77E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VIII
Number Of Satellites:	6
Planetary Gravity:	1.22g
Planetary Size	
Diameter:	17,500 km
Equatorial Circumference:	24,000 km
Total Surface Area:	292,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	157,200,000 sq km
Planetary Conditions	
Length Of Day:	25%
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	25%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Vulcan
Technological/ Sociopolitical Index:	888899–98
Planetary Trade Profile:	DDCCCCC/B(C)

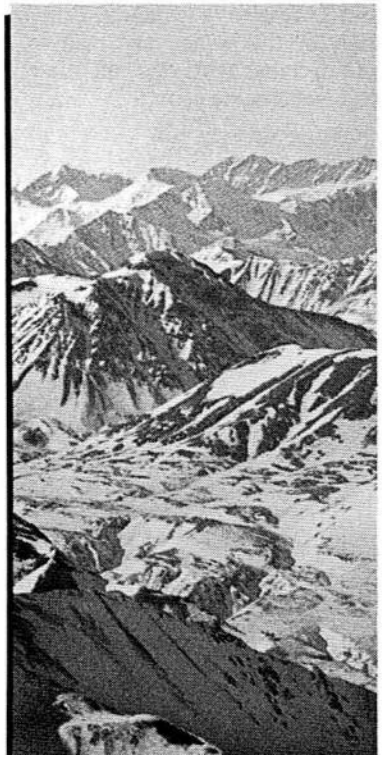
One of the first planets ever colonized by Vulcans, Calanara is a private preserve for distinguished Vulcan citizens, past and present. The majority of the planet has been parcelled into large tracts that the Vulcan government awards to individuals on the basis of scientific and social achievement. Located in the planet's northern hemisphere is a special memorial center, housing the state-owned burial grounds for Vulcan's honored dead. Among those interred there is Surak, Vulcan's most esteemed philosopher, whose remains were transported from Vulcan following Calanara's colonization.



World Log: CANOPUS

System Data	
System Name:	Beta Geminorum
Map Coordinates:	3.30N 1.27E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	3
Planetary Gravity:	.84g
Planetary Size	
Diameter:	16,500 km
Equatorial Circumference:	51,000 km
Total Surface Area:	625,000,000 sq km
Percent Land Mass:	25%
Total Land Area:	156,250,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Thin
General Climate:	Arctic
Mineral Content	
Normal Metals:	30%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Andorian
Technological/ Sociopolitical Index:	998998–77
Planetary Trade Profile:	BEFCDEG/B(C)

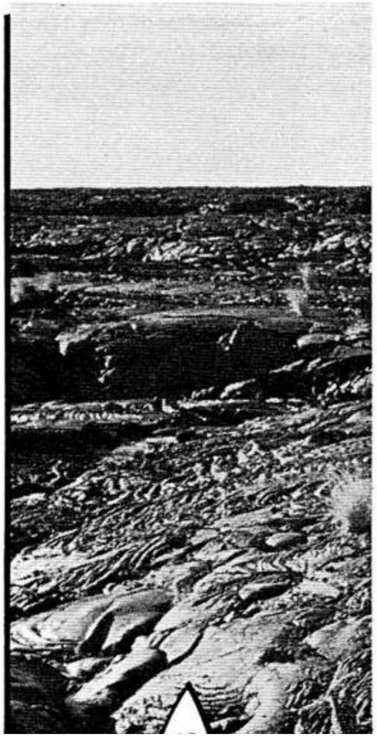
Canopus supports a large industry that produces heavy equipment and durable goods for colonial expeditions throughout the entire Federation. Subsidiary concerns also manufacture a wide array of equipment used to construct permanent settlements on newly colonized planets. Canopus is the largest center of Andorian culture outside their home system. A Star Fleet support facility is located on Canopus as well.



World Log: CAPELLA

System Data	
System Name:	Alpha Aurigae
Map Coordinates:	8.75S 4.25E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	1
Planetary Gravity:	1.5g
Planetary Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	710,000,000 sq km
Percent Land Mass:	70%
Total Land Area:	497,000,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Terrestrial
General Climate:	Desert
Mineral Content	
Normal Metals:	40%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	20%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Capellan
Technological/ Sociopolitical Index:	467555–56
Planetary Trade Profile:	None

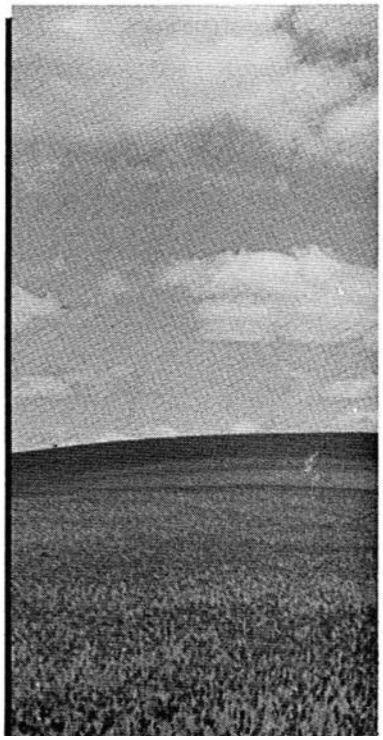
Capella is a desert world populated by Humanoid nomads who may be the descendants of a lost Terran expedition. Their loose tribal organization is only beginning to take on cohesive political unity. The planet is valuable for its various industrial grade crystals and other ores. The Federation has negotiated a temporary trade agreement with the Capellans, although trade has not yet officially begun. The planet is also known for its indigenous life forms, including the Capellan power cat.



World Log: CASTOR FIELDS

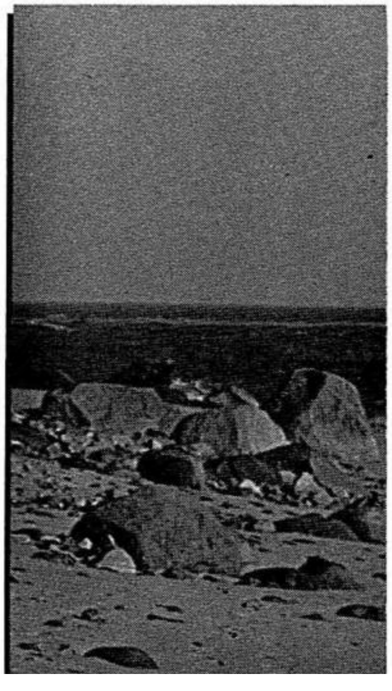
System Data	
System Name:	Castora
Map Coordinates:	0.64N 6.15E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	2
Planetary Gravity:	.88g
Planetary Size	
Diameter:	13,750 km
Equatorial Circumference:	29,000 km
Total Surface Area:	222,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	133,200,000 sq km
Planetary Conditions	
Length Of Day:	23 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	22%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	50% Human 10% Vulcan 40% Other
Technological/ Sociopolitical Index:	889998–76
Planetary Trade Profile:	BAABCAD/B(C)

This remote planet is owned and operated by a consortium of Federation citizens who use it solely for breeding and training numerous strains of Terran racing horses. Racing events held during the latter part of the year attract millions of enthusiasts annually. The sale of pure-bred stock produces planetary revenues in the hundreds of billions of credits. Currently, close to a billion inhabitants of Castor Fields are involved directly or indirectly in this commercial concern.



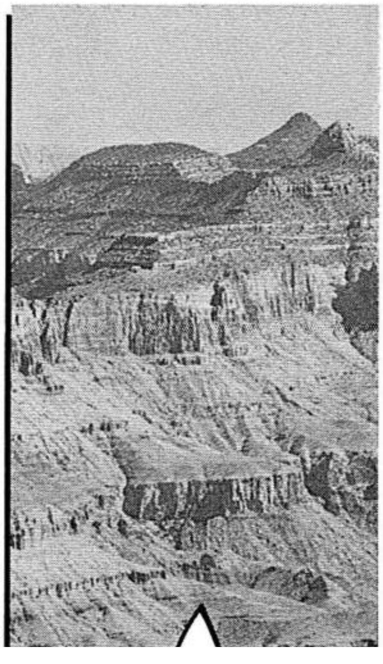
World Log: CAVALIER	
System Data	
System Name:	Calka
Map Coordinates:	1.67S 0.51E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	4
Planetary Gravity:	.87g
Planetary Size	
Diameter:	9,600 km
Equatorial Circumference:	14,700 km
Total Surface Area:	300,500,000 sq km
Percent Land Mass:	50%
Total Land Area:	150,250,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	10%
Gemstones:	20%
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	656565–67
Planetary Trade Profile:	BCCBDCC/A(B)

Cavalier is an Arcturan colony world that was established two generations ago. Like their Arcturan ancestors, the inhabitants of Cavalier have adopted ancient Terran customs and dress, emulating the society and class structure of the English Empire of approximately 1640-1680. Largely an agricultural planet, Cavalier also derives revenues from large numbers of offworld tourists who come to visit each year. Not only do visitors enjoy the Cavalier lifestyle, but they can also relax at the numerous corporate entertainment centers on the planet's southern continent.



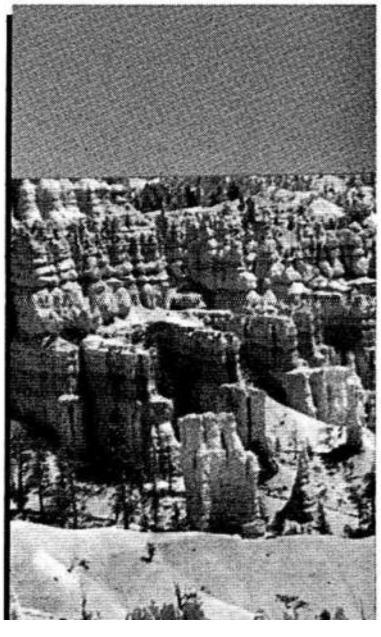
World Log: CESTUS III	
System Data	
System Name:	Cestus
Map Coordinates:	3.29N 8.54E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	1
Planetary Gravity:	.95G
Planetary Size	
Diameter:	14,300 km
Equatorial Circumference:	45,000 km
Total Surface Area:	555,000,000 sq km
Percent Land Mass:	80%
Total Land Area:	44,000,000 sq km
Planetary Conditions	
Length Of Day:	21 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	25%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	40% Human 60% Tellarite
Technological/ Sociopolitical Index:	898876–77
Planetary Trade Profile:	DDDCDED/D(D)

Having unknowingly settled within Gorn-claimed space, the original 125-person colony on Cestus III was killed in an unanticipated Gorn attack. Subsequent negotiations with the Gorns averted full-scale war once both sides realized the misunderstanding. Thereafter, Cestus III was ‘granted to the Federation under an agreement that limited both governments' expansion in the area. After 15 years, the original colony has been rebuilt, and is valuable both for mining and for trade with Gorns. This latter aspect is only marginal, however, as resentment over the death of the first colonists still remains.



World Log: CHARLEMAGNE	
System Data	
System Name:	Aquilla Scorpi
Map Coordinates:	2.63N 7.66E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	2
Planetary Gravity:	1.3g
Planetary Size	
Diameter:	9,700 km
Equatorial Circumference:	17,000 km
Total Surface Area:	370,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	222,000,000 sq km
Planetary Conditions	
Length Of Day:	30 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	Trace
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	777677–75
Planetary Trade Profile:	CCCDCDE/B(C)

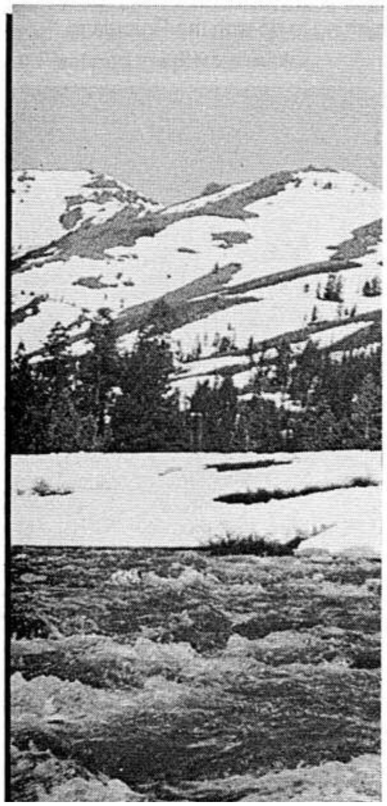
Charlemagne was settled a century ago by dissidents who rejected the Federation's peace treaty with the Romulans. The inhabitants of the planet based their own government on Terran monarchy from Europe in 800 A.D.. Unlike other 'copy-cat' worlds in the Federation, Charlemagne's inhabitants have rejected none of present-day technological advantages. However, because they strictly limit imports to encourage local industry, they usually go without recent Federation innovations. Star Fleet maintains a small support/repair facility on the planet, and many of the planet's inhabitants are affiliated with Star Fleet in some capacity.



World Log: COCHRANE I

System Data	
System Name:	Zeta Riguli
Map Coordinates:	2.73S 5.23W
Number Of Class M Present:	1
Planetary Data	
Position In System:	VII
Number Of Satellites:	3
Planetary Gravity:	1.15g
Planetary Size	
Diameter:	17,500 km
Equatorial Circumference:	24,000 km
Total Surface Area:	185,000,000 sq km
Percent Land Mass:	55%
Total Land Area:	101,750,000 sq km
Planetary Conditions	
Length Of Day:	20.5 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	35%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	22%
Cultural Data	
Dominant Life Form:	60% Alpha Centauri 40% Human
Technological/ Sociopolitical Index:	889999–98
Planetary Trade Profile:	BAABBA/B(B)

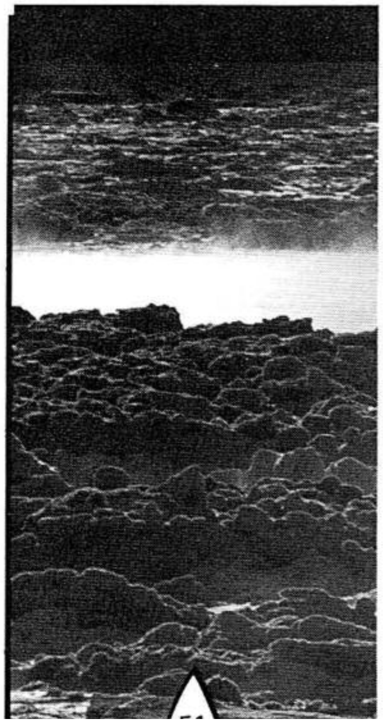
Settled by Humans and Alpha Centaurans following the disappearance of Zephram Cochrane, Cochrane I is a thriving industrial planet rich in dilithium and radioactives. It also hosts the central administrative center for the Federation's Department of Colonization and numerous subsidiary agencies and organizations. The planet's Cochrane University is one of the most heavily attended in the quadrant.



World Log: COMMISSARIATE

System Data	
System Name:	Beta Trianguli
Map Coordinates:	5.07N 2.25W
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	3
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	7,800 km
Equatorial Circumference:	25,500 km
Total Surface Area:	315,000,000 sq km
Percent Land Mass:	100%
Total Land Area:	315,000,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	20%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	35% Andorian 20% Vulcan 15% Human 15% Caitian 15% Other
Technological/ Sociopolitical Index:	898985–78
Planetary Trade Profile:	BEECCCC/B(C)

The largest center of underground farming in the Federation, Commissariate supports over one-and-a-half billion inhabitants in subterranean farm complexes for most of its year. Due to the lack of sunlight and the psychological problems associated with living underground, most people living on this planet are agricultural specialists working here only for limited durations. Despite this constant turnover in personnel, Commissariate maintains one of the highest food production rates of all agricultural planets.



World Log: CORIDAN

System Data	
System Name:	Danthos
Map Coordinates:	2.70S 0.91 W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	1
Planetary Gravity:	1.29g
Planetary Size	
Diameter:	15,600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	522,000,000 sq km
Percent Land Mass:	95%
Total Land Area:	496,500,000 sq km
Planetary Conditions	
Length Of Day:	25 Hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	32%
Radioactives:	30%
Gemstones:	04%
Industrial Crystals:	09%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Coridan
Technological/ Sociopolitical Index:	967594–67
Planetary Trade Profile:	FCAGDEF/B(E)

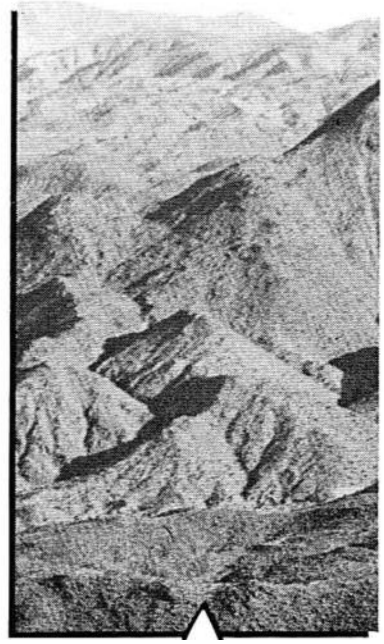
This small planet and its native humanoid population has been the subject of considerable controversy over the last three decades. Rich in natural minerals and large amounts of dilithium, Coridan was often the victim of privateering raids by commercial and even government-sponsored sectors. The Coridan Problem intensified when the local inhabitants applied for admission into the Federation, thus sparking a conference on Babel. However, their admission was narrowly denied in favor of a quarantined status.

World Log: CRASSUS	
System Data	
System Name:	Ambiphon
Map Coordinates:	2.78N 5.32W
Number Of Class M Present:	2
Planetary Data	
Position In System:	II
Number Of Satellites:	0
Planetary Gravity:	1.17g
Planetary Size	
Diameter:	19,000 km
Equatorial Circumference:	28,550 km
Total Surface Area:	275,000,000 sq km
Percent Land Mass:	42%
Total Land Area:	115,500,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	37%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	35%
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	7788793–88
Planetary Trade Profile:	BBBCBBB/C(C)

Crassus is noted for its abundance of natual mineral deposits, including gold iridium and titanium. Though the mineral fields are not as extensive as those found on other worlds, Crassian ores lie near the planet's surface, are easy to extract, and thus more profitable. The local Human inhabitants on Crassus do not mine their ores, but lease mining rights to offworld speculators and prospectors. Local Crassian industry centers around processing and extracting ores. Not surprisingly, the Federation's Bureau of Mining is located on Crassus. Star Fleet maintains a small in-system defense post as well as a small repair facility in orbit around the planet.

World Log: CRATER'S WORLD	
System Data	
System Name:	Gamma Zeta IV
Map Coordinates:	4.45S 6.01W
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	625,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	312,500,000 sq km
Planetary Conditions	
Length Of Day:	27 Hours
Atmospheric Density:	Terrestrial
General Climate:	Arid
Mineral Content	
Normal Metals:	20%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace

Crater's World is the site of a once-prosperous civilization of aliens characterized by their biological dependence on large quantities of salt. Scientists speculate that a change in the planet's global weather patterns dried up vast salt seas, driving the race to extinction. Originally designated Planet M113, the world was later named in honor of the late Professor Crater and his wife Nancy, the first archeologists to examine the planet's archeological ruins. In the last decade, a permanent archeological base has been established on the planet to continue the Craters' work.

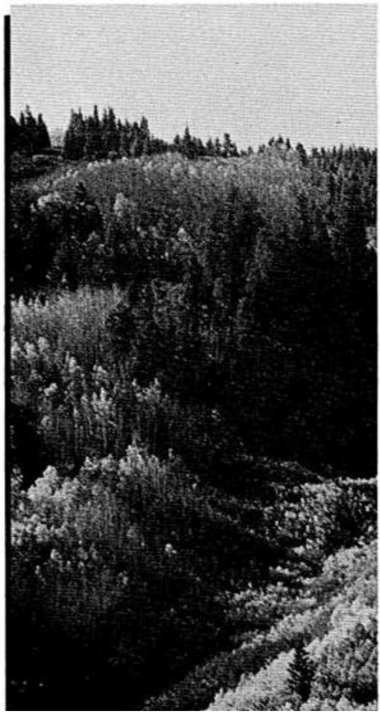


World Log: CYCLOPUS	
System Data	
System Name:	Verigus K
Map Coordinates:	8.00S 6.82E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	0
Planetary Gravity:	1.5g
Planetary Size	
Diameter:	19,500 km
Equatorial Circumference:	60,000 km
Total Surface Area:	765,000,000 sq km
Percent Land Mass:	71%
Total Land Area:	540,000,000 sq km
Planetary Conditions	
Length Of Day:	32 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	38%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	35% Human 30% Andorian 20% Alpha Centauri 15% Other
Technological/ Sociopolitical Index:	999994–95
Planetary Trade Profile:	ACFDDEF/A(B)

A trade world located near the border of the Triangle Zone, Cyclopus is one of the Federation's most distant associate-member worlds. It is noted for producing a hybrid grain developed from a local grass variety and a Terran wheat. Cyclopus' governmental structure is also noteworthy, as it is modeled after that of the ancient Terran Roman Empire. Cyclopian officials are friendly with the other independent worlds in the region, but steadfastly refuse to have anything to do with the Romulans.

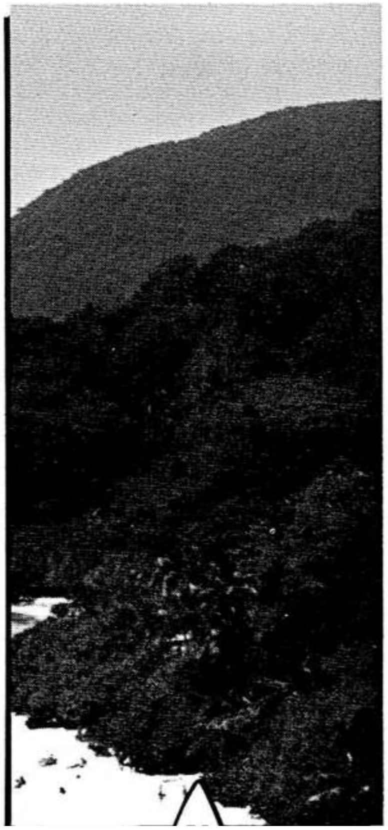
World Log: CYGNET XIV	
System Data	
System Name:	Cygnus
Map Coordinates:	4.05N 0.41E
Number Of Class M Present:	1
Planetary Data	
Position In System:	XIV
Number Of Satellites:	3
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	19,000 km
Equatorial Circumference:	60,000 km
Total Surface Area:	725,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	362,500,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	70%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Cygnian
Technological/ Sociopolitical Index:	989887–66
Planetary Trade Profile:	ABABBBA/A(B)

An elected member of the Federation Council, Cygnet XIV is a planet with a female-dominated social order. Cygnian females are highly advanced and intelligent, but their male counterparts are only semi-intelligent. In physical appearance, Cygnians are humanoid with vestigial tails and central spine formations resembling those of Terran horses. They are very technologically advanced, especially in computers and cybernetics. Cygian females are highly prized as computer specialists by both Star Fleet and the private sector.



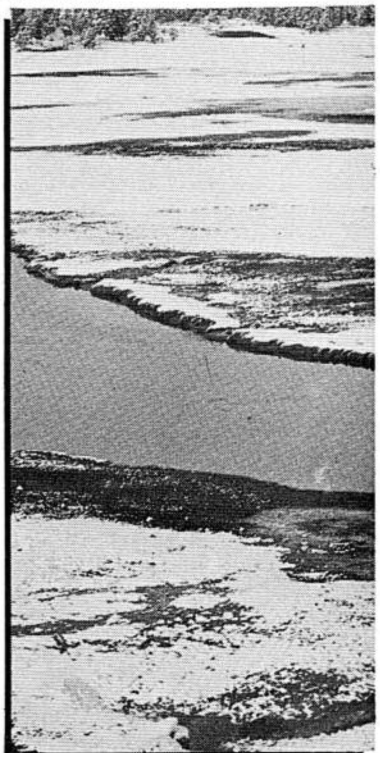
World Log: DARAN V	
System Data	
System Name:	Daran
Map Coordinates:	3.88S 4.93E
Number Of Class M Present:	1
Planetary Data	
Position In System:	V
Number Of Satellites:	2
Planetary Gravity:	.96g
Planetary Size	
Diameter:	12,520 km
Equatorial Circumference:	39,330 km
Total Surface Area:	492,447,000 sq km
Percent Land Mass:	26%
Total Land Area:	128,036,000sq km
Planetary Conditions	
Length Of Day:	28 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	48%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	65% Human 20% Tellarite 10% Vulcan 5% Other
Technological/ Sociopolitical Index:	998983–76
Planetary Trade Profile:	CAFEBCF/G(G)

A major supply and support facility during the Romulan War, Daran V is still a major trading center and supports many descendants of veterans of that war. Daran textiles are renowned for their quality and durability, and Daran architects have created marvels on the planet. The planet's inhabitants are reputed to be among the most friendly individuals in the Federation.



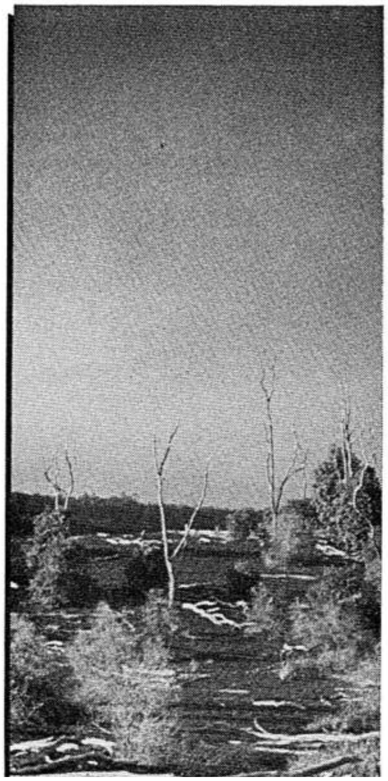
World Log: DELTA IV	
System Data	
System Name:	Delta Principius
Map Coordinates:	0.21S 1.02E
Number Of Class M Present:	2
Planetary Data	
Position In System:	V
Number Of Satellites:	7
Planetary Gravity:	.95g
Planetary Size	
Diameter:	15,000 km
Equatorial Circumference:	51,000 km
Total Surface Area:	625,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	375,000,000 sq km
Planetary Conditions	
Length Of Day:	20 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	55%
Radioactives:	15%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Deltan
Technological/ Sociopolitical Index:	988767–87
Planetary Trade Profile:	ABABCCB/B(B)

Delta IV is the home of a Humanoid race known as the Deltans, an advanced and very pacifistic culture noted for their artistic achievements. Deltans resemble Humans in all outward respects except for the absence of facial and body hair. Like Orion females, all Deltans possess an unusual biochemical makeup that generates massive amounts of pheromones,which sexually stimulate members of the opposite sex. Current Deltan population is six billion.



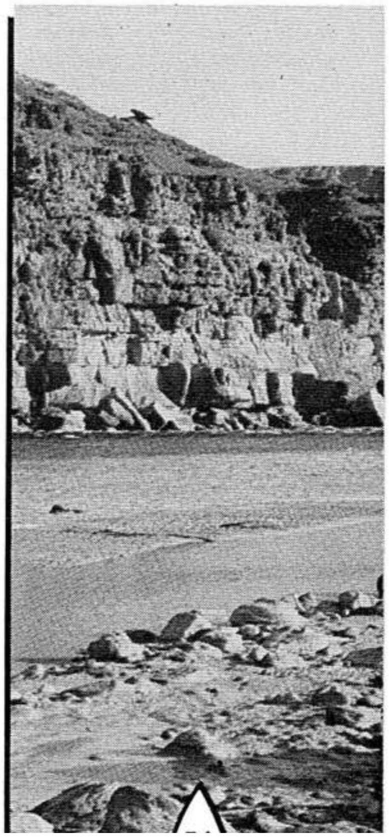
World Log: DELTA VEGA	
System Data	
System Name:	Trimordidion
Map Coordinates:	7.27S 4.02E
Number Of Class M Present:	1
Planetary Data	
Position In System:	X
Number Of Satellites:	0
Planetary Gravity:	1.05g
Planetary Size	
Diameter:	18,100 km
Equatorial Circumference:	50,000 km
Total Surface Area:	700,000,000 sq km
Percent Land Mass:	90%
Total Land Area:	630,000,000 sq km
Planetary Conditions	
Length Of Day:	19 Hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	10%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	40%
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	667768–76
Planetary Trade Profile:	CCCDCB/C(C)

Delta Vega originally housed only an automated dilithium cracking station. Later reports of extensive dilithium deposits far beyond original estimates spurred numerous industrial concerns to establish permanent mining facilities on this otherwise barren and uninteresting world. In the last decade, Delta Vega has acquired over seven million Human inhabitants who have helped turn the planet into an important trade center.



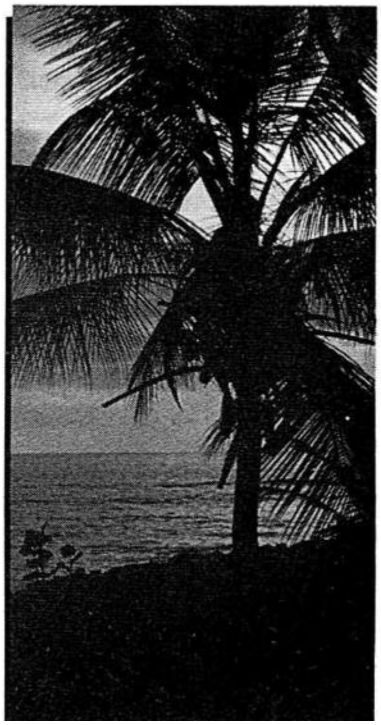
World Log: DEMOISELLE II	
System Data	
System Name:	Demoiselle
Map Coordinates:	3.22N 2.28E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	3
Planetary Gravity:	0.88g
Planetary Size	
Diameter:	11,700 km
Equatorial Circumference:	35,500 km
Total Surface Area:	425,000,000 sq km
Percent Land Mass:	97%
Total Land Area:	412,500,000 sq km
Planetary Conditions	
Length Of Day:	20 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperature
Mineral Content	
Normal Metals:	20%
Radioactives:	Trace
Gemstones:	45%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	25% Human 25% Cygnian 50% Other
Technological/ Sociopolitical Index:	886778–77
Planetary Trade Profile:	CCBDEBC/C(D)

One of the newer Federation colonies to gain associate-member status, Demoiselle II is ruled by a matriarchy. Its main export is gemstones, and native Demoisellians are regarded as expert gemcutters and appraisers. Diplomats and traders sometimes exchange stones unearthed from Demoiselle II with the Orions, who prize these gems highly.



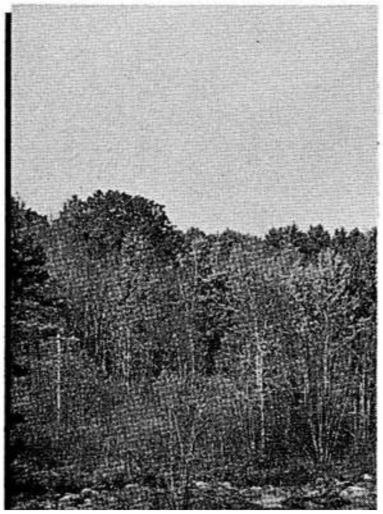
World Log: DENEB	
System Data	
System Name:	Alpha Cygni
Map Coordinates:	2.38N 7.22E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	3
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	10,500 km
Equatorial Circumference:	32,000 km
Total Surface Area:	400,000,000 sq km
Percent Land Mass:	15%
Total Land Area:	60,000,000 sq km
Planetary Conditions	
Length Of Day:	19 Hours
Atmospheric Density:	Thick
General Climate:	Tropical
Mineral Content	
Normal Metals:	20%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	60% Human 40% Alpha Centauri
Technological/ Sociopolitical Index:	998898–67
Planetary Trade Profile:	CCBCEDE/C(C)

A world almost completely covered by swamps and marshes, Deneb is an important source of native plants used to synthesize various pharmaceutical products. A combined population of Human and Centauri settlers have constructed a small city-capitaol near Deneb's northern ice cap. Here, rare plant and mineral resources are converted into their base chemical forms for shipment offworld. Deneb also has the distinction of being home to one of the Federation's more loathsome creatures, the Denebian slime devil.



World Log: DENEVA	
System Data	
System Name:	Beta Darius
Map Coordinates:	0.23S 5.79W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	3
Planetary Gravity:	1.15g
Planetary Size	
Diameter:	9,700 km
Equatorial Circumference:	14,500 km
Total Surface Area:	300,500,000 sq km
Percent Land Mass:	45%
Total Land Area:	135,225,000 sq km
Planetary Conditions	
Length Of Day:	25.5 hrs
Atmospheric Density:	Warm Temperate
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	40%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	60% Deltan 20% Tellarite 20% Other
Technological/ Sociopolitical Index:	998988–88
Planetary Trade Profile:	AABAABA/A(B)

Deneva is one of the Federation's major commercial and industrial centers, and has a representative on the Federation Council. Founded in Stardate 1/64 by Alpha Centaurans, Deneva served as a ship repair and resupply center in the Romulan War. After the war, numerous Human and non-Human settlers joined the Centaurans. Deneva has come to be regarded as a symbol of the Federation, a monument to the cultural advantages made through inter-racial cooperation. Its rich variety of minerals supports a vast metallurgical-industrial base. Two decades ago, Deneva's population was decimated by hundreds of flying parasites, but recent census figures show signs of recovery. Current population estimates are between four and four-and-a-half million inhabitants.



World Log: EDO	
System Data	
System Name:	Epsilon Minora
Map Coordinates:	0.15N 4.11W
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	1
Planetary Gravity:	.85g
Planetary Size	
Diameter:	8,520 km
Equatorial Circumference:	12,450 km
Total Surface Area:	220,500,000 sq km
Percent Land Mass:	40%
Total Land Area:	90,000,000 sq km
Planetary Conditions	
Length Of Day:	22 hrs
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	50%
Radioactives:	Trace
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Edoan
Technological/ Sociopolitical Index:	766688–67
Planetary Trade Profile:	BBCBBBC/B(C)

Sometimes referred to as Sauria, Edo is a small planet orbiting an orange Type K sun. It is the home of an intelligent race of reptilians, who are among the newest additions to the Federation. Edoans are tri-spacial beings, having three arms and three legs. They have a particular affinity for mathematics, and many serve on Star Fleet crews as skilled navigators. Edo itself is a warm, humid, tropical world with considerable amounts of mineral and other natural resources. It is famous for its numerous wines, which are prized by collectors and connoisseurs throughout Federation space and beyond. Current population of Edo is between four and five billion inhabitants.

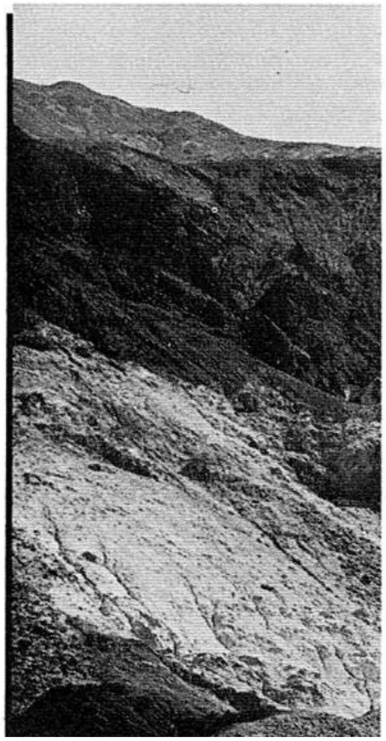
World Log: EKOS	
System Data	
System Name:	M43 Alpha
Map Coordinates:	2.02S 6.95E
Number Of Class M Present:	2
Planetary Data	
Position In System:	III
Number Of Satellites:	1
Planetary Gravity:	0.98g
Planetary Size	
Diameter:	18,000 km
Equatorial Circumference:	35,000 km
Total Surface Area:	317,000,000 sq km
Percent Land Mass:	45%
Total Land Area:	142,650,000 sq km
Planetary Conditions	
Length Of Day:	25.5 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	33%
Radioactives:	12%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Ekosi
Technological/ Sociopolitical Index:	556552–77
Planetary Trade Profile:	None

Ekos supports a humanoid culture similar to that of Terra during the first half of the 20th century. Twenty years ago, Ekos was in a state of political and social upheaval due to a series of global economic problems. At that time, Dr. John Gill, the noted Federation historian, was a cultural observer on Ekos. He violated the Prime Directive by using Federation technology to raise a pseudo-Nazi party to dominance there. Dr. Gill's efforts were later subverted by party members seeking their own advancement. The subsequent intervention by an investigating party from the *USS Enterprise* helped narrowly avert a war between Ekos and neighboring Zeon, though Dr. Gill was killed during the resolution of the crisis. Ekos has since been protected from further contact, allowing the population of both Ekos and Zeon to work out their problems in a peaceful, cooperative manner.

World Log: ELDORADO

System Data	
System Name:	Eldamas 344
Map Coordinates:	2.47S 4.69W
Number Of Class M Present:	2
Planetary Data	
Position In System:	III
Number Of Satellites:	7
Planetary Gravity:	.97g
Planetary Size	
Diameter:	8,780 km
Equatorial Circumference:	12,200 km
Total Surface Area:	288,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	144,00,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Thin
General Climate:	Cool Terrestrial
Mineral Content	
Normal Metals:	Trace
Radioactives:	25%
Gemstones:	20%
Industrial Crystals:	30%
Special Minerals:	20%
Cultural Data	
Dominant Life Form:	40% Andorian 40% Tellarate 20% Human
Technological/ Sociopolitical Index:	688766–77
Planetary Trade Profile:	CCBBBBC/B(C)

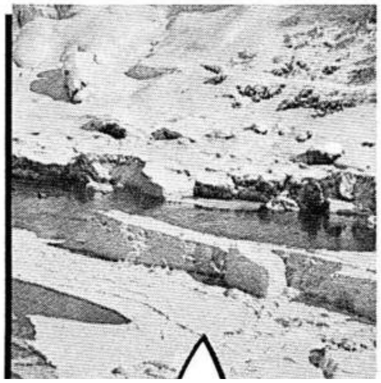
A geologist's delight, Eldorado was named for its natural wealth in numerous types of rare minerals, including both radioactives and small dilithium deposits. Currently supporting a population of one billion inhabitants, Eldorado is estimated to supply two percent of the Federation's industrial crystal needs for the next decade. Star Fleet maintains a small patrol station here, with a squadron of corvettes to discourage would-be pirates and other illegal opportunists.



World Log: EMINIAR VII

System Data	
System Name:	Eminiar
Map Coordinates:	2.15S 5.77E
Number Of Class M Present:	2
Planetary Data	
Position In System:	VII
Number Of Satellites:	1
Planetary Gravity:	1.22g
Planetary Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	500,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	200,000,000 sq km
Planetary Conditions	
Length Of Day:	25 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	10%
Radioactives:	10%
Gemstones:	20%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Eminian
Technological/ Sociopolitical Index:	888987–86
Planetary Trade Profile:	BBABCDD/B(B)

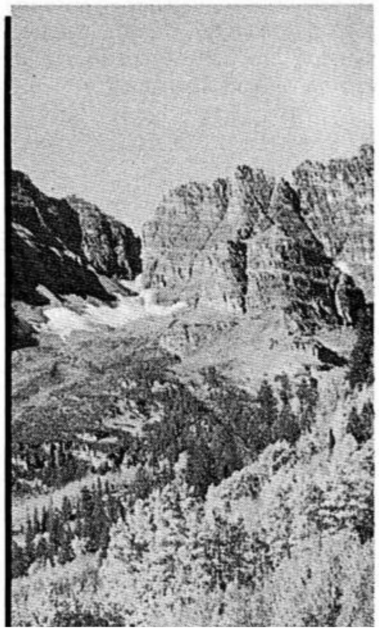
First contacted by Terran explorers in the first decade of Federation interstellar exploration, Eminian culture remained a mystery until contact with the *USS Enterprise* 16 years ago. Then it was determined that the Eminians had considerable technological sophistication, having developed interplanetary flight some 400 years before the Federation contacted them. Regrettably, the Eminians did not make as much progress in the social sciences as they did in the physical sciences. When Eminiar's colony world, Vendikar, declared itself independent, war erupted between the two. To preserve their way of life, both planets developed a computerized attack and defense system, enabling the two planets to continue their warfare without risking destruction of either civilization. As a result of the *Enterprise*'s visit, this arrangement was rendered obsolete, and a peaceful solution was negotiated. Today, Eminiar VII is a full-status member of the Federation in good standing.



World Log: ETERNITY

System Data	
System Name:	Alpha Eridani
Map Coordinates:	4.55N 6.02E
Number Of Class M Present:	1
Planetary Data	
Position In System:	I
Number Of Satellites:	0
Planetary Gravity:	.95g
Planetary Size	
Diameter:	16,000 km
Equatorial Circumference:	48,000 km
Total Surface Area:	600,000,000 sq km
Percent Land Mass:	75%
Total Land Area:	450,000,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	10%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace

One of the most beautiful planets in the Federation, Eternity is one of the more somber as well. It serves as Star Fleet Command's memorial to all those who died in conflicts between the Federation and foreign powers. Here lie Star Fleet personnel (and civilians) who died in the Romulan and the Four Years War, as well as persons killed in 'unofficial' or otherwise short-lived conflicts such as the Organian Conflict and the Gorn attack on Cestus III. Eternity is staffed by a permanent records team and a Star Fleet honor guard. Star Fleet supports three destroyers here, which maintain a continuous watch over Eternity.



World Log: FELLOWSHIP

System Data	
System Name:	Beta Maxima 437
Map Coordinates:	6.31N 3.22E
Number Of Class M Present:	3
Planetary Data	
Position In System:	VII
Number Of Satellites:	2
Planetary Gravity:	1.15g
Planetary Size	
Diameter:	10,250 km
Equatorial Circumference:	17,500 km
Total Surface Area:	285,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	114,000,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	10%
Radioactives:	Trace
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Mixed
Technological/ Sociopolitical Index:	343455–89
Planetary Trade Profile:	DDDDEDD/C(D)

The planet Fellowship is a haven for those who find themselves trapped by the growing complexities of a computerized age. The small planet was founded 40 years ago by a Terran religious organization that desired to return to a simpler way of life, devoid of technological contrivances and dependencies. Since its creation, the colony world has attracted numerous like-minded individuals, and recent census figures show a population in excess of two billion inhabitants. Citizens of Fellowship tolerate any and all philosophical positions that tolerate others in turn. They still refuse to use modern technological inventions of any kind, preferring to use their own skills. An associate-member in the Federation, Fellowship maintains contact with other worlds through their trade in local gemstones and handicrafts.

World Log: GAMMA HYDRA IV

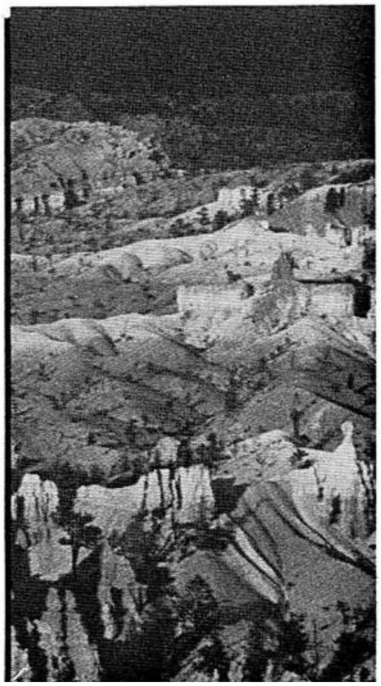
System Data	
System Name:	Gamma Hydra
Map Coordinates:	5.91S 5.96E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	2
Planetary Gravity:	1.25g
Planetary Size	
Diameter:	14,250 km
Equatorial Circumference:	45,000 km
Total Surface Area:	552,000,000 sq km
Percent Land Mass:	70%
Total Land Area:	386,400,000 sq km
Planetary Conditions	
Length Of Day:	27 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	20%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	45%
Cultural Data	
Dominant Life Form:	60% Alpha Centauri 40% Human
Technological/ Sociopolitical Index:	989889–77
Planetary Trade Profile:	DDCDDCD/D(D)

Gamma Hydra IV is something of a 'hard luck' planet among the Federation's inhabited worlds. Little was known about the planet until after the Romulan War, and its proximity to the Romulan Neutral Zone was a deterrent to settlers for many years. Later, it was discovered that Gamma Hydra IV contained vast deposits of iridium. This discovery prompted the establishment of a small mining community some 15 years ago. Not long after the community was settled, Gamma Hydra IV's orbit took it through a rogue comet that showed traces of an unusual form of radiation. The inhabitants' radiation sickness caused them to age rapidly, eventually killing all members of the colony. The planet remained abandoned until four years ago when a second, more successful effort took root. Despite the lack of major setbacks since that time, the inhabitants of Gamma Hydra IV are beset with a reputation for having (and causing) bad luck.

World Log: GIDEON

System Data	
System Name:	Delta Dorado
Map Coordinates:	3.57S 2.35E
Number Of Class M Present:	1
Planetary Data	
Position In System:	I
Number Of Satellites:	1
Planetary Gravity:	1.12g
Planetary Size	
Diameter:	15,900 km
Equatorial Circumference:	47,500 km
Total Surface Area:	611,00,000 sq km
Percent Land Mass:	95%
Total Land Area:	580,450,000 sq km
Planetary Conditions	
Length Of Day:	31 Hours
Atmospheric Density:	Thick
General Climate:	Warm Termperate
Mineral Content	
Normal Metals:	12%
Radioactives:	12%
Gemstones:	Trace
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Gideon
Technological/ Sociopolitical Index:	499785-87
Planetary Trade Profile:	None

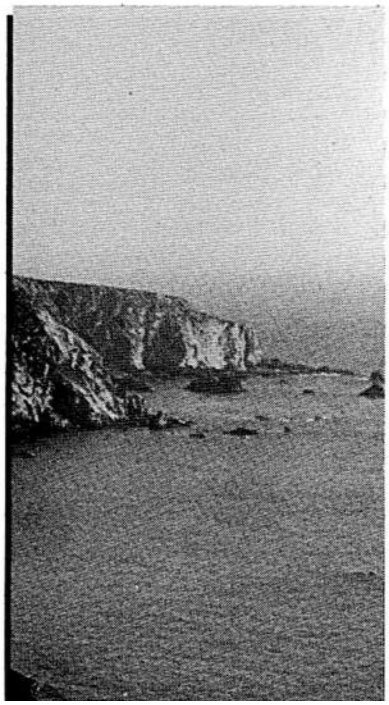
Gideon has suffered considerably from rampant overpopulation. It is an independent world that had previously avoided all contact with the Federation, fearing the cultural shock that would ensue. Fourteen years ago, the deliberate introduction of Vegan choriomeningitus into the planet's population caused the deaths of over six billion inhabitants. Though this has reduced the overpopulation problem, the Gideonites need to overcome deeper philosophical problems before they can resume contact with the rest of the Federation.



World Log: GREENSWARD

System Data	
System Name:	Sigma Valara
Map Coordinates:	1.44N 4.98E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VIII
Number Of Satellites:	2
Planetary Gravity:	0.82g
Planetary Size	
Diameter:	17,200 km
Equatorial Circumference:	28,000 km
Total Surface Area:	295,000,000 sq km
Percent Land Mass:	33%
Total Land Area:	97,350,000 sq km
Planetary Conditions	
Length Of Day:	19.5 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	37%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	998997-97
Planetary Trade Profile:	DDDEDCD/D(D)

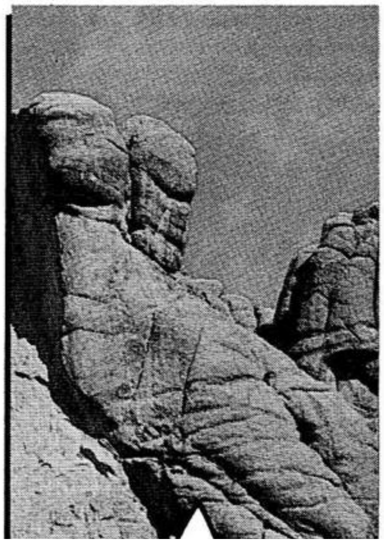
A relatively young world, geologically speaking, Greensward is a collection of flat forest lands and long strips of coastal beach area. More importantly, it is also one of the few planets within the Federation to contain extensive ruins of an extinct advanced civilization. Scholars disagree as to whether the ruins originate from the Vegan Tyranny or are remnants of Preserver culture. Local industry centers around the careful excavation of artifacts and their resale to other archeological institutions.



World Log: HALKA

System Data	
System Name:	Nola Boradne
Map Coordinates:	4.27S 4.58E
Number Of Class M Present:	1
Planetary Data	
Position In System:	V
Number Of Satellites:	0
Planetary Gravity:	.87g
Planetary Size	
Diameter:	12,800 km
Equatorial Circumference:	45,000 km
Total Surface Area:	462,000,000 sq km
Percent Land Mass:	45%
Total Land Area:	207,900,000 sq km
Planetary Conditions	
Length Of Day:	19 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperature
Mineral Content	
Normal Metals:	20%
Radioactives:	Trace
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	35%
Cultural Data	
Dominant Life Form:	Halkan
Technological/ Sociopolitical Index:	555567–85
Planetary Trade Profile:	None

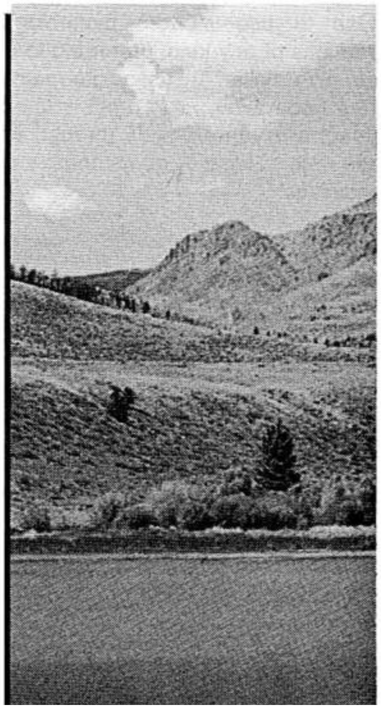
An independent world desiring no affiliation with the Federation, Halka is the home of an advanced race of Humanoids with a highly developed social philosophy. Though their planet is rich in dilithium crystal deposits, the Halkans are reluctant to trade with any members of the Federation because their native ores might, however indirectly, be used to commit acts of violence. This total trade refusal has hampered otherwise good relations with the Federation. Nevertheless, the Federation recognizes the Halkans' right to determine their own policies, and abides by their decisions. Star Fleet patrols the Nola Boradne system to discourage would-be smugglers and opportunists from attempts to mine Halkan minerals without authorization.



World Log: HARMONY

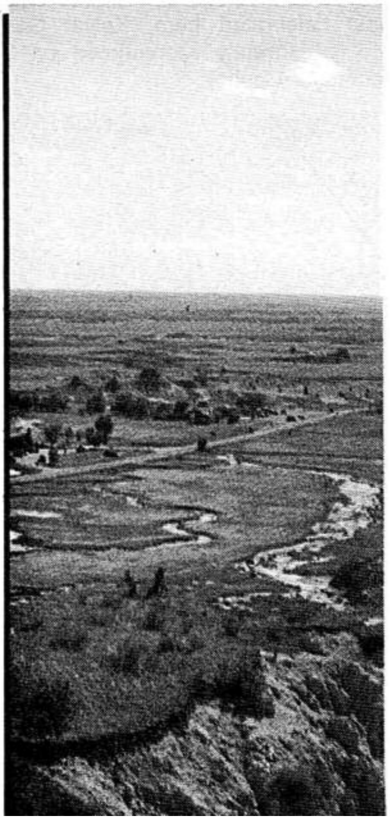
System Data	
System Name:	Harridane 226
Map Coordinates:	5.27N 3.89E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	6
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	8,900 km
Equatorial Circumference:	14,600 km
Total Surface Area:	295,500,000 sq km
Percent Land Mass:	30%
Total Land Area:	88,650,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	20%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Vulcan
Technological/ Sociopolitical Index:	887789–98
Planetary Trade Profile:	BBBCBBB/B(C)

Harmony is a Vulcan mixture of dissimilar economic interests molded into an efficient and profitable enterprise. Founded 70 years ago by a group of philosophers and scientists from the Vulcan Science Academy, Harmony has a pleasant environment that has attracted other Vulcan special-interest groups, including merchant traders, geologists, astrophysicists, and retired Star Fleet officers. Star Fleet maintains a small support/repair center that contributes handsomely to the planet's treasury.



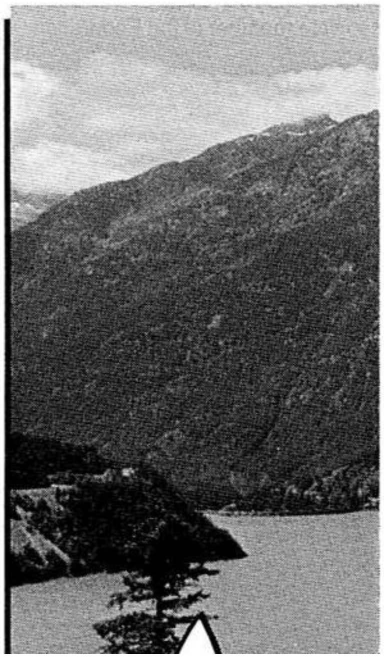
World Log: HELLIOS	
System Data	
System Name:	Sigma Wyrenex
Map Coordinates:	0.48N 2.02W
Number Of Class M Present:	1
Planetary Data	
Position In System:	VI
Number Of Satellites:	2
Planetary Gravity:	1.9g
Planetary Size	
Diameter:	10,500 km
Equatorial Circumference:	33,000 km
Total Surface Area:	412,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	206,000,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	25%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	75% Alpha Centauri 25% Human
Technological/ Sociopolitical Index:	999877–77
Planetary Trade Profile:	CCBBDCB/B(B)

Settled by Human and Alpha Centauran colonists a few years after the Federation was formed, Hellios is renowned for its agricultural production. Although newer worlds have outstripped Hellios in sheer volume of goods harvested, Hellios inhabitants pride themselves on the quality of their foods. In particular, Helliosian fruits are rare and expensive delicacies.



World Log: IMAGINATION	
System Data	
System Name:	Metriunn 867
Map Coordinates:	3.33N 3.82W
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	3
Planetary Gravity:	1.0g
Planetary Size	
Diameter:	8,760 km
Equatorial Circumference:	15,400 km
Total Surface Area:	228,000,000 sq km
Percent Land Mass:	100%
Total Land Area:	228,000,000 sq km
Planetary Conditions	
Length Of Day:	20 Hours
Atmospheric Density:	Terrestrial
General Climate:	Controlled Terrestrial
Mineral Content	
Normal Metals:	Trace
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	30% Human 70% Other
Technological/ Sociopolitical Index:	9999987–89
Planetary Trade Profile:	AABAABA/A(B)

This pleasure planet is actually a small planetoid, much of which has been hollowed out. Imagination serves the entertainment needs of millions of Federation tourists and vacationers each year. Though not as elaborate as similar facilities elsewhere in the Federation, Imagination is renowned for its unique collection of theme parks and period-preserves. Catering to every type of culture, past or present, this planet has earned the respect of sightseers and luxury-oriented citizens from dozens of different cultures. The saying is that if it can be imagined, it can be found on Imagination.



World Log: INDARAX	
System Data	
System Name:	Epsilon Indar
Map Coordinates:	2.51N 1.52E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	2
Planetary Gravity:	.79g
Planetary Size	
Diameter:	13,000 km
Equatorial Circumference:	42,000 km
Total Surface Area:	505,000,000 sq km
Percent Land Mass:	42%
Total Land Area:	212,100,000 sq km
Planetary Conditions	
Length Of Day:	20 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	10%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Andorian
Technological/ Sociopolitical Index:	987985-76
Planetary Trade Profile:	None

Indarax was one of the last planets to be colonized by the Andorian Empire. As such, it is slow to renounce traditional Andorian ways. True to the aggressive nature of their ancestors, Indarax maintains no natural industry. Instead, the native Andorians have turned Indarax into one gigantic center to train military personnel in various facets of the military arts. After failing to discourage this practice, the Federation recognized the right of the native Indaraxans to conduct their unusual occupation. Indaraxans saw extensive service during both the Romulan and Four Years War, earning respect and acceptance from other, more pacifistic members of the Federation. Today, Star Fleet maintains a permanent liaison/ training center run by Andorians on Indarax.

World Log: INGRAHAM B

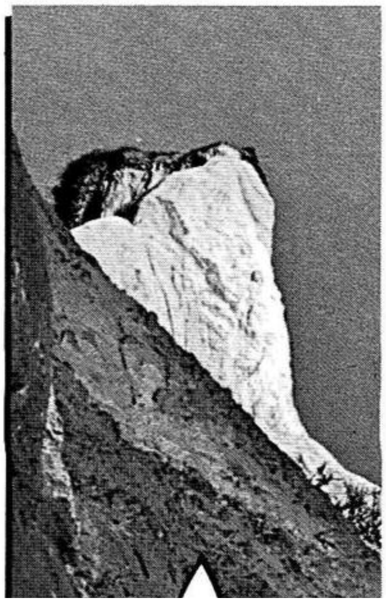
System Data	
System Name:	Ingrahm
Map Coordinates:	1.48S 5.02E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	4
Planetary Gravity:	.94g
Planetary Size	
Diameter:	8,900 km
Equatorial Circumference:	28,000 km
Total Surface Area:	287,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	172,200,000 sq km
Planetary Conditions	
Length Of Day:	27 Hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	25%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	9888887–98
Planetary Trade Profile:	BACBBDC/A(B)

Ingraham B is noted throughout the Federation for its dazzling array of lush native flora. Botanical enthusiasts prize many of its specimens as natural works of art worth millions of credits. Some scientists believe sentient plant life may exist somewhere on Ingraham B, and a scientific research center has been established to investigate the possibility. Sixteen years ago, hordes of flying parasites almost wiped out the population, then established a symbiotic-mind control over the survivors. The inhabitants have largely recovered from that costly encounter, and maintain uninterrupted trade with the rest of the Federation. Ingraham B presently has a representative on the Federation Council.

World Log: IOTIA

System Data	
System Name:	Sigma Iotia
Map Coordinates:	6.78S 4.55W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	1
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	10,300 km
Equatorial Circumference:	33,000 km
Total Surface Area:	400,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	240,000,000 sq km
Planetary Conditions	
Length Of Day:	25 Hours
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	22%
Radioactives:	08%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Iotian
Technological/ Sociopolitical Index:	556675–78
Planetary Trade Profile:	CBDEECC/C(C)

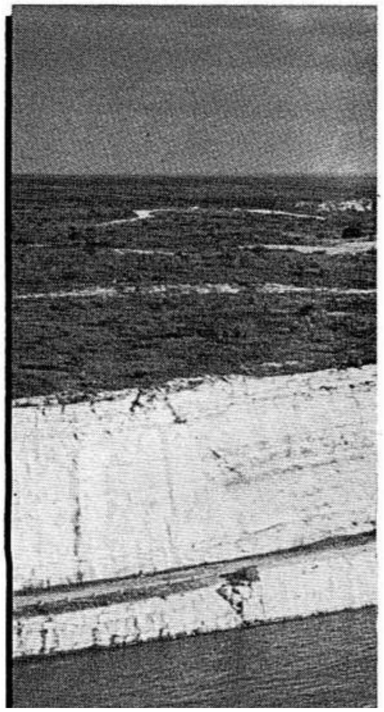
Discovered early in the history of interstellar flight, the Humanoid culture of Iotia was introduced to Human social values and customs before the Federation's Prime Directive was developed. As a result of this 'contamination', the Iotians developed an aberrant culture based on an ancient Terran society that had organized criminal elements. Although this hastened the unification of the planet, it was accomplished with needless bloodshed and unnecessary misery. Since the *USS Enterprise*'s investigation of Iotia 15 years ago, Federation sociological teams have guided the Iotians to a more ethical form of government. Iotia is currently an associate member of the Federation.



World Log: IZAR

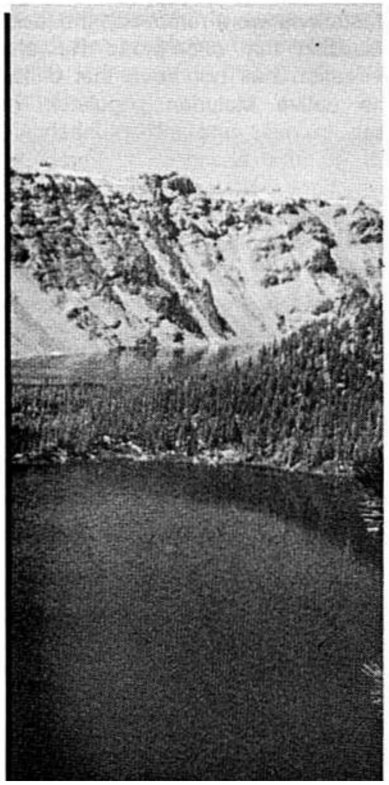
System Data	
System Name:	Epsilon Bootis
Map Coordinates:	4.37N 4.44W
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	1.25g
Planetary Size	
Diameter:	15,500 km
Equatorial Circumference:	51,500 km
Total Surface Area:	614,000,000 sq km
Percent Land Mass:	55%
Total Land Area:	337,700,000 sq km
Planetary Conditions	
Length Of Day:	25 Hours
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	22%
Radioactives:	12%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Izaran
Technological/ Sociopolitical Index:	998988–88
Planetary Trade Profile:	BBABBBC/A(B)

One of the original Human-Alpha Centauri colonies, Izar has long since developed into a major cultural and industrial center. Izarans are known for the high value they place on independence. Today, Izar is noted chiefly as a producer of advanced power systems and related technology, although much of the original Izaran wilderness has remained intact. This planet is also famous as the home of the Federation's most celebrated hero, Kelvar Garth, and is currently represented on the Federation Council.



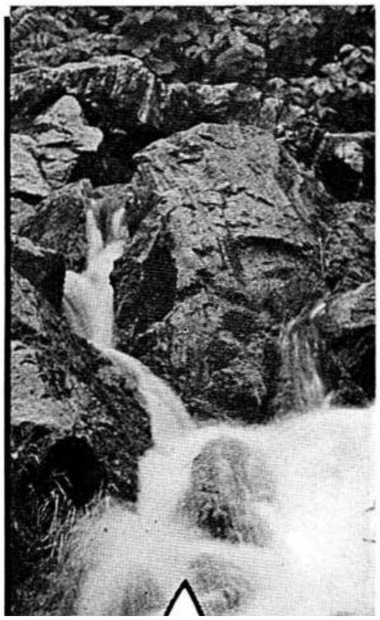
World Log: JORINDAS	
System Data	
System Name:	Beta Vertis
Map Coordinates:	0.99S 4.27W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	2
Planetary Gravity:	.85g
Planetary Size	
Diameter:	19,000 km
Equatorial Circumference:	58,000 km
Total Surface Area:	721,000,000 sq km
Percent Land Mass:	30%
Total Land Area:	216,300,000 sq km
Planetary Conditions	
Length Of Day:	19 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	80%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Joridian
Technological/ Sociopolitical Index:	987777–67
Planetary Trade Profile:	BBCBCCB/B(C)

An advanced humanoid culture, Joridians lack vocal cords, which forces them to communicate telepathically. Their average lifespan of 35 years is one of the shortest of any advanced species in the Federation. Despite a high birth rate, the population of Jorindas continues to remain at one million inhabitants. Jorindas is also noteworthy as the home planet of a unique life form known as the tribble.



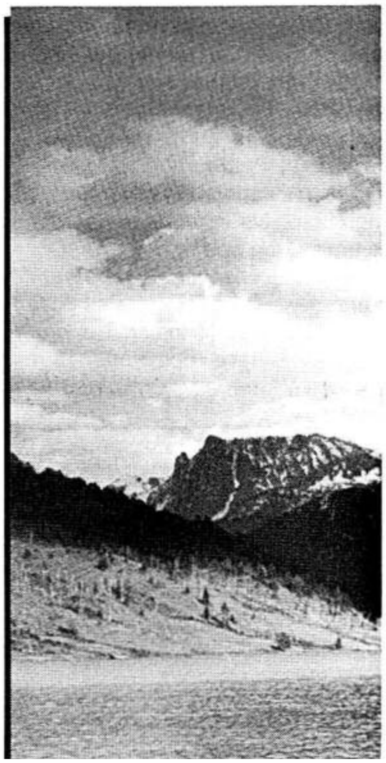
World Log: KAFERIA	
System Data	
System Name:	Tau Ceti
Map Coordinates:	1.27S 3.56E
Number Of Class M Present:	1
Planetary Data	
Position In System:	V
Number Of Satellites:	2
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	20,000 km
Equatorial Circumference:	61,000 km
Total Surface Area:	750,000,000 sq km
Percent Land Mass:	80%
Total Land Area:	600,000,000 sq km
Planetary Conditions	
Length Of Day:	30 hrs
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	50%
Radioactives:	30%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Kaferian
Technological/ Sociopolitical Index:	988767–77
Planetary Trade Profile:	ABCCCBB/A(C)

One of the first intelligent non-Humanoid races contacted by Humanity, Kaferians are insectoids who have developed an advanced civilization on a planet that resembles a gigantic rain forest. Kaferians are docile and reticent creatures. Though they have maintained trade agreements with the Federation since its inception, they have only recently applied for and received associate-member status. Kaferian culture is based on the production of native foodstuffs and local pharmaceuticals, which serve as major export items. Current population estimates place the number of Kaferian inhabitants at less than 500,000.



World Log: LAKELAND	
System Data	
System Name:	Purlii
Map Coordinates:	8.20S 6.42E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	2
Planetary Gravity:	.9g
Planetary Size	
Diameter:	11,500 km
Equatorial Circumference:	36,000 km
Total Surface Area:	460,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	230,000,000 sq km
Planetary Conditions	
Length Of Day:	32 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	5%
Radioactives:	Trace
Gemstones:	4%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	999999–97
Planetary Trade Profile:	BDDECDF/A(C)

Lakeland is a planet-wide collection of lakes and streams. One of the Federation's finest vacation spots, it is also one of the farthest, being located near the Triangle Zone. Distance notwithstanding, Lakeland enjoys a thriving tourist trade supported by innumerable fishing and aquatic sporting reserves across the planet's surface. Lakeland's government is representative, reflecting its status as a Federation colony world.

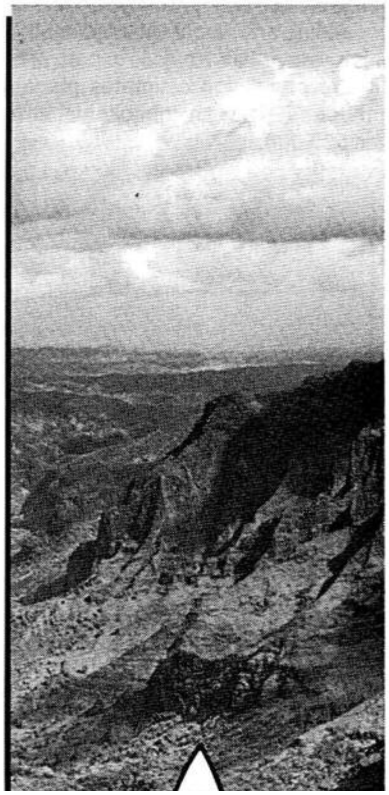


World Log: LAURA'S WORLD	
System Data	
System Name:	Laurison 294
Map Coordinates:	2.44S 3.75E
Number Of Class M Present:	1
Planetary Data	
Position In System:	1
Number Of Satellites:	1
Planetary Gravity:	.95g
Planetary Size	
Diameter:	10,200 km
Equatorial Circumference:	28,500 km
Total Surface Area:	325,000,000 sq km
Percent Land Mass:	55%
Total Land Area:	178,750,000 sq km
Planetary Conditions	
Length Of Day:	25 Hours
Atmospheric Density:	Terrestrial
General Climate:	Controlled Terrestrial
Mineral Content	
Normal Metals:	10%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	75% Human 25% Other
Technological/ Sociopolitical Index:	689997–77
Planetary Trade Profile:	DDDEDD/C(B)

Billed as the most romantic planet in the galaxy, Laura's World is one of the few planets owned by a private citizen. Purchased shortly after its discovery some 30 years ago by the eccentric billionaire Maximus O'Connor, the planet was a wedding gift to his wife, Laura Deneuve Gamartine. Two years later, Laura died from Vegan choriomeningitus. In a state of continual grief, O'Connor retired from corporate life and turned Laura's World into a planet-wide shrine to the memory of his late wife. When O'Connor died three years later, ownership of the planet fell into the hands of his brother and only surviving heir, Paul O'Connor. Seizing on the tragic elements surrounding the planet's history, Paul turned the planet into a vast parkland. After spending vast amounts of his inheritance to complete the project, he opened Laura's World as a private, unspoiled get-away "for lovers only". O'Connor's sales pitch and the publicity surrounding his brother's eccentricity have combined to make Laura's World a unique financial success.

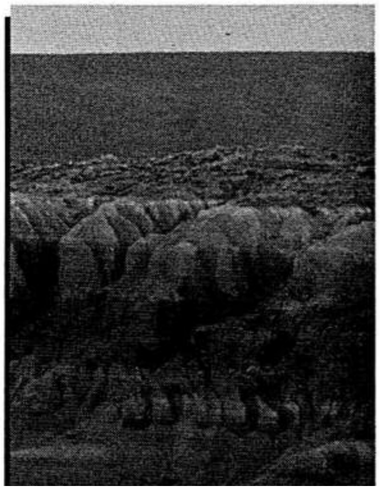
World Log: MAKUS III	
System Data	
System Name:	Makus
Map Coordinates:	2.18S 0.33E
Number Of Class M Present:	2
Planetary Data	
Position In System:	III
Number Of Satellites:	1
Planetary Gravity:	1.4g
Planetary Size	
Diameter:	12,200 km
Equatorial Circumference:	19,500 km
Total Surface Area:	322,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	193,200,000 sq km
Planetary Conditions	
Length Of Day:	28 hrs
Atmospheric Density:	Thick
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	50%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	20%
Cultural Data	
Dominant Life Form:	70% Vulcan 30% Human
Technological/ Sociopolitical Index:	887887–76
Planetary Trade Profile:	BBBBCCC/B(C)

A cloudy, humid world, Makus III is a Federation member with a mixed Vulcan and Human population. Settled by Vulcan outcasts who had rejected the reforms of Surak, these individuals retain a cultural psychology with more emotional freedom than their parent world allows. Makus III later received an influx of Vegan technicians and scientists after several large dilithium deposits were discovered on the planet.



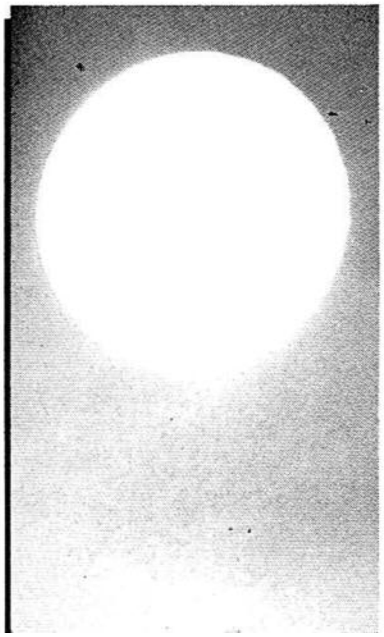
World Log: MALURIA	
System Data	
System Name:	Omega Cygni
Map Coordinates:	0.59S 5.23E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	6
Planetary Gravity:	.78g
Planetary Size	
Diameter:	18,200 km
Equatorial Circumference:	62,000 km
Total Surface Area:	715,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	357,500,000 sq km
Planetary Conditions	
Length Of Day:	29 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	20%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Malurian
Technological/ Sociopolitical Index:	888885–98
Planetary Trade Profile:	ABCBBCC/B(B)

Maluria is a civilization on the mend. Fifteen years ago, all but a handful of its technologically advanced Humanoid natives were destroyed by a powerful space probe, later identified as the Nomad, which had been launched from Terra over a century before. The only survivors of the Malurian race were the independent traders and citizens living offplanet at the time of the disaster. As the planet's technological base itself was not disrupted (only the 'biological infestations' were removed), the task of rebuilding this once-proud Humanoid civilization has not been that difficult. The native Malurian population has risen to over one million inhabitants, due to the absence of immigration restrictions. Nevertheless, it will still take several decades for the planet to recover completely from the *Nomad* disaster.



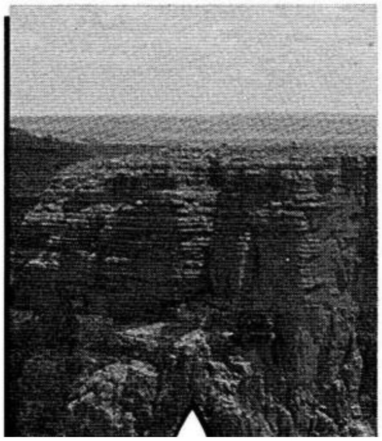
World Log: MEDUSA	
System Data	
System Name:	Rhys
Map Coordinates:	5.57S 6.37E
Number Of Class M Present:	1
Planetary Data	
Position In System:	5
Number Of Satellites:	2
Planetary Gravity:	2.1g
Planetary Size	
Diameter:	12,200 km
Equatorial Circumference:	18,500 km
Total Surface Area:	350,200,000 sq km
Percent Land Mass:	20%
Total Land Area:	70,400,000 sq km
Planetary Conditions	
Length Of Day:	32 hrs
Atmospheric Density:	Thick
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	20%
Radioactives:	25%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Medusan
Technological/ Sociopolitical Index:	988877–89
Planetary Trade Profile:	None

This planet is wrapped in a thick cloud layer with average surface temperatures of 38–65° C. Medusa is also the home of an ancient race that evolved beyond the need for physical bodies. Few offworlders have ever seen a Medusan, as the sight of these beings can cause serious mental disorder. Nevertheless, Medusans are a pacifistic race totally devoted to the advancement of science. In particular, they excel in interspacial geometries. They are often consulted to solve complex navigational problems for civilian and scientific interests throughout the Federation.



World Log: MEMORY ALPHA	
System Data	
System Name:	Karn Sim
Map Coordinates:	3.31S 4.25E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	0
Planetary Gravity:	1.0g
Planetary Size	
Diameter:	14,000 km
Equatorial Circumference:	44,000 km
Total Surface Area:	560,000,000 sq km
Percent Land Mass:	100%
Total Land Area:	560,000,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Controlled Terrestrial
Mineral Content	
Normal Metals:	55%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace

The only redeeming feature of this barren asteroid is the Star Fleet Museum. Constructed over the last two decades, the museum is the central repository of all relevant historical, scientific, and cultural knowledge of every Federation member. This ongoing project is the central concern of the Federation Science Foundation. The main computer systems used on Memory Alpha contain the most advanced Cygnian and Terran data-processing features. Access to Memory Alpha's data banks is open and free to scholars upon request. Fourteen years ago, this installation was seriously damaged during the Lights of Zetar incident. At that time, it was feared that data loss in the main computer memory core would be irretrievable. Fortunately, the majority of the main computer's memory has been restored through the efforts of Daystrom Data Concepts Corporation.



World Log: MERAK	
System Data	
System Name:	Latis Cyrtiva
Map Coordinates:	2.77N 3.22W
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	5
Planetary Gravity:	1.22g
Planetary Size	
Diameter:	13,000 km
Equatorial Circumference:	38,000 km
Total Surface Area:	495,000,000 sq km
Percent Land Mass:	70%
Total Land Area:	346,500,000 sq km
Planetary Conditions	
Length Of Day:	32 Hours
Atmospheric Density:	Thick
General Climate:	Tropical
Mineral Content	
Normal Metals:	20%
Radioactives:	25%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Vulcan
Technological/ Sociopolitical Index:	999879–98
Planetary Trade Profile:	AABBCBA/A(B)

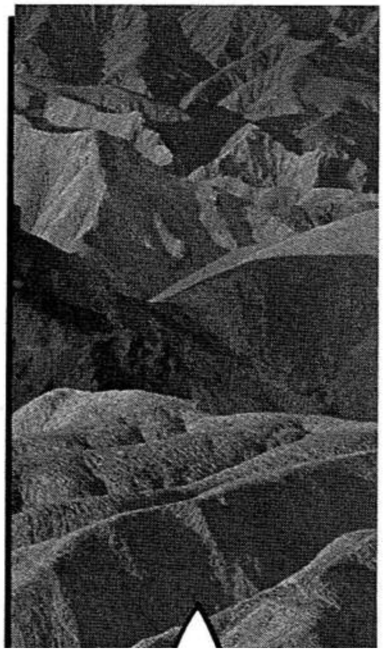
One of the first worlds to be colonized by Vulcans, Merak is a tropical world rich in radioactives and industrial crystals used to run power plants. The need for increased productivity caused the colonists to eliminate much of the planet's northern rain forests to make way for newer, more advanced facilities. After the Four Years War, Merak began constructing ship-building facilities as well. It currently produces a large number of Star Fleet vessels of varying designs each year, and is also an important commercial and trade center.

World Log: MIRI'S WORLD	
System Data	
System Name:	Beta Persei
Map Coordinates:	5.48S 6.02E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	1
Planetary Gravity:	1.01g
Planetary Size	
Diameter:	9,840 km
Equatorial Circumference:	15,575 km
Total Surface Area:	303,700,000 sq km
Percent Land Mass:	60%
Total Land Area:	182,220,000 sq km
Planetary Conditions	
Length Of Day:	24 hours
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	40%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Onlie
Technological/ Sociopolitical Index:	344532-33
Planetary Trade Profile:	None

Almost identical to Terra, Miri's World is a prime example of dual planetary evolution. The inhabitants of the planet flourished until a biological experiment into life-prolongation failed horribly, releasing a virus that killed all the adults on the planet. Though the doomed experiment did greatly expand the lifespan of the surviving children, each of these contracted the disease at the age of puberty. When the starship *Enterprise* discovered the planet about ten years ago, only a handful of survivors inhabited the planet. Since then, subsequent surveys of the planet have uncovered nearly 10,000 individuals, all under the age of twelve. Preventive serums have been successful in combatting the virus, and Federation sociological and planetary development teams are on Miri's World to guide the inhabitants until they are able to govern themselves.

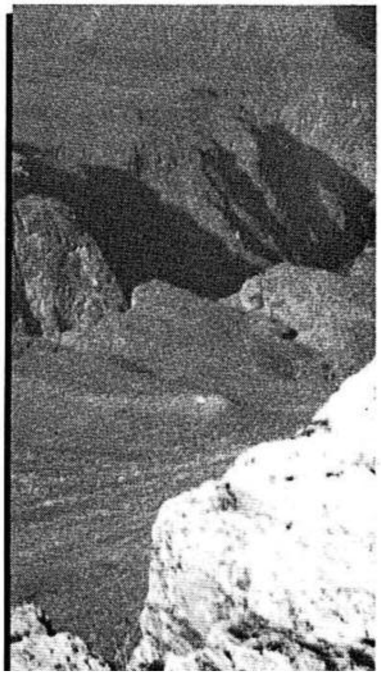
World Log: MORENA	
System Data	
System Name:	Eridani Gamma
Map Coordinates:	2.88N 3.12E
Number Of Class M Present:	1
Planetary Data	
Position In System:	I
Number Of Satellites:	0
Planetary Gravity:	1.11g
Planetary Size	
Diameter:	14,500 km
Equatorial Circumference:	47,000 km
Total Surface Area:	575,000,000 sq km
Percent Land Mass:	80%
Total Land Area:	460,000,000 sq km
Planetary Conditions	
Length Of Day:	31 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	5%
Radioactives:	15%
Gemstones:	Trace
Industrial Crystals:	10%
Special Minerals:	10%
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	998997–67
Planetary Trade Profile:	AABBAAB/A(B)

Morena is the first planetary system outside the Terran-Alpha Centauri sector that Humans colonized strictly for starship construction. Though now eclipsed by more advanced production facilities on other worlds, Morena remains the most prestigious starship design and development center outside the original borders of the Federation. A featureless, barren world with little vegetation, Morena is also the home of the Morenan tree bear. This curious creature derives its sustenance not from organic compounds, but from the mental radiations generated by feelings of affection in Humanoids.



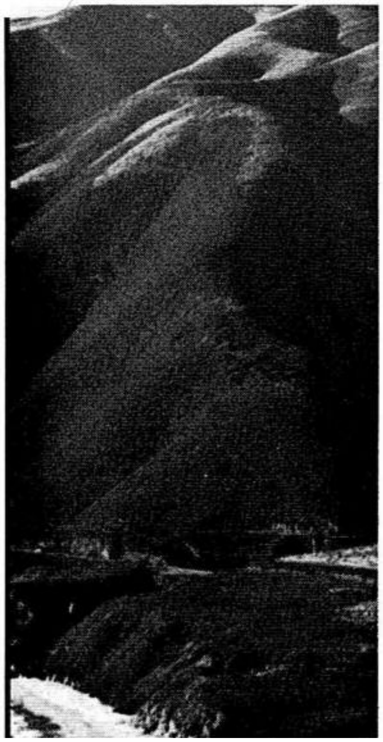
World Log: MUDD'S WORLD	
System Data	
System Name:	Beta Aurigae
Map Coordinates:	4.22S 5.32E
Number Of Class M Present:	1
Planetary Data	
Position In System:	2
Number Of Satellites:	0
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	10,600 km
Equatorial Circumference:	17,500 km
Total Surface Area:	280,000,000 sq km
Percent Land Mass:	90%
Total Land Area:	252,000,000 sq km
Planetary Conditions	
Length Of Day:	27 Hours
Atmospheric Density:	Thin
General Climate:	Cold Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace

Devoid of all surface life, this cold planet is inhabited by androids. An itinerant trader named Harcourt Fenton Mudd first discovered the world. Through their interaction with Mudd, the androids learned of inherent flaws in Human behavior. Desiring to save the Human race from themselves, the androids attempted to gain control of the Federation starship *Enterprise*, but were defeated. The planet has since been quarantined. Except for authorized Federation science teams studying the androids, no outside contact is permitted with the planet.



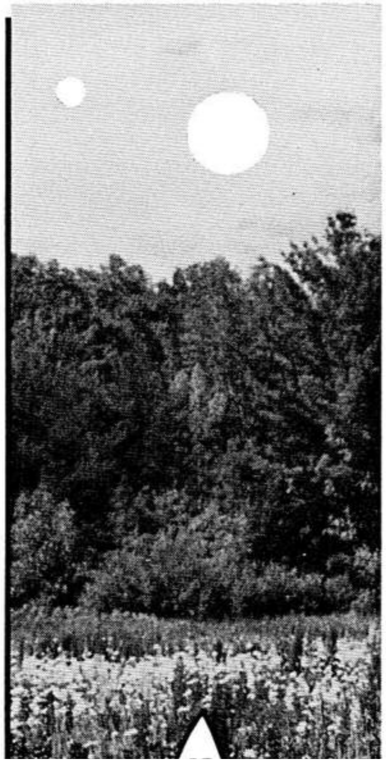
World Log: NEW ABERDEEN	
System Data	
System Name:	Phi Galacius
Map Coordinates:	2.41S 0.21E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VI
Number Of Satellites:	2
Planetary Gravity:	.86g
Planetary Size	
Diameter:	12,250 km
Equatorial Circumference:	42,000 km
Total Surface Area:	460,000,000 sq km
Percent Land Mass:	40%
Total Land Area:	180,000,000 sq km
Planetary Conditions	
Length Of Day:	28 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	10%
Radioactives:	Trace
Gemstones:	10%
Industrial Crystals:	25%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	50% Andorian 25% Cygnian 25% Human
Technological/ Sociopolitical Index:	889998-88
Planetary Trade Profile:	AABAAB/A(B)

A large industrial world, New Aberdeen is noteworthy for its culture, which is based on ancient Terran Scottish traditions. The planet's inhabitants are grouped into family clans, each of which sends representatives to a world-wide congress. New Aberdeen is also one of the Federation's largest manufacturers of commercial and civilian starships. Vast orbital and surface production centers produce some of the finest luxury and transport vessel designs in Federation space.



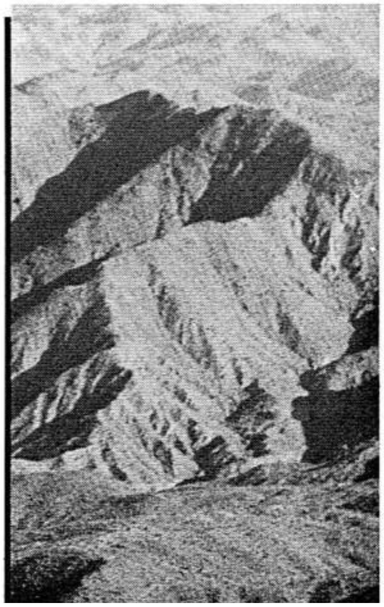
World Log: NEW PARIS	
System Data	
System Name:	Omega Aurigae
Map Coordinates:	1.78S 4.78W
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	4
Planetary Gravity:	.97
Planetary Size	
Diameter:	9,100 km
Equatorial Circumference:	28,000 km
Total Surface Area:	350,000,000 sq km
Percent Land Mass:	80%
Total Land Area:	280,000,000 sq km
Planetary Conditions	
Length Of Day:	25 Hours
Atmospheric Density:	Thick
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	20%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	888898-97
Planetary Trade Profile:	AABBAA/A(B)

Settled in Stardate 0/9205 by Terran colonists from northern Europe, New Paris is governed by a representative system resembling that of Terra's 18th-century republican France. Inhabitants of New Paris are noted throughout the Federation for their literary and musical contributions. New Parisian fashion is also in popular demand on many of the UFP's civilized worlds. A cultural and trade leader, New Paris supports a population of over one billion inhabitants.



World Log: PALLAS PRIME	
System Data	
System Name:	Pallas 785
Map Coordinates:	2.33S 7.04E
Number Of Class M Present:	1
Planetary Data	
Position In System:	5
Number Of Satellites:	2
Planetary Gravity:	.88g
Planetary Size	
Diameter:	8,750 km
Equatorial Circumference:	12,750 km
Total Surface Area:	285,500,000 sq km
Percent Land Mass:	90%
Total Land Area:	256,950,000 sq km
Planetary Conditions	
Length Of Day:	18 hrs
Atmospheric Density:	Thin
General Climate:	Desert
Mineral Content	
Normal Metals:	30%
Radioactives:	30%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	60% Deltan 20% Human 20% Cygnian
Technological/ Sociopolitical Index:	565455-57
Planetary Trade Profile:	ACDCDDE/D(C)

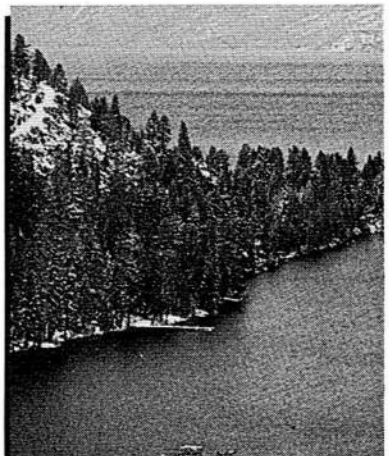
An arid desert world, Pallas Prime is nevertheless attractive to Federation speculators for its wealth of radioactives. Numerous small mining and trading centers have been established along the planet's northern hemisphere. However, surface conditions on the world are harsh. The planet's rapid rotation produces fierce wind storms that can last for several days. Despite this inhospitable climate, some agriculture has been successfully introduced near Pallas Prime's cooler northern ice cap, which has helped make the planet's inhabitants somewhat self-sufficient. Star Fleet maintains a training facility on the planet's southern continent for desert survival exercises.



World Log: PLATONIUS

System Data	
System Name:	Helios
Map Coordinates:	2.04N 5.93E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	1
Planetary Gravity:	.97g
Planetary Size	
Diameter:	11,800 km
Equatorial Circumference:	37,000 km
Total Surface Area:	460,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	230,000,000 sq km
Planetary Conditions	
Length Of Day:	19 Hours
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	10%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	50%
Cultural Data	
Dominant Life Form:	Platonian
Technological/ Sociopolitical Index:	665779–97
Planetary Trade Profile:	DDEEDED/D(X)

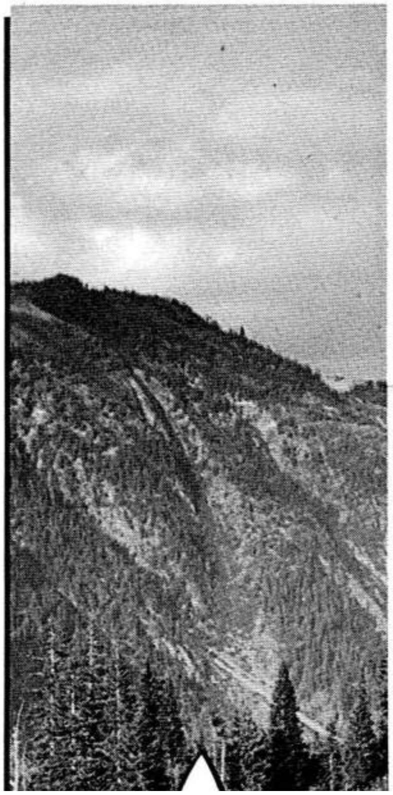
Platonius is inhabited by a race of Humanoids who visited ancient Terra in the fifth century B.C. after their star, Sandara, went supernova. Eventually settling on Platonius, the space explorers adopted many of the ancient Greeks' philosophical ideals. However, the Platonian race has suffered from increasing lifespans and decreasing birth rates, the result of a rare substance known as kironite, which was introduced into the Platonian food chain. When members of Star Fleet landed on the planet some 15 years ago, they determined that ingestion of this substance enhanced the psionic abilities of the individual, though with a corresponding decrease in fertility. Because the native Platonians exhibited uncontrollable desires to dominate other, less advanced groups, the Helios system has been quarantined until further notice.



World Log: PRECIPICE

System Data	
System Name:	Brightstar
Map Coordinates:	9.11S 4.61E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VIII
Number Of Satellites:	1
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	14,300 km
Equatorial Circumference:	44,000 km
Total Surface Area:	560,000,000 sq km
Percent Land Mass:	94%
Total Land Area:	530,000,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	14%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	999994–97
Planetary Trade Profile:	DDDDDEF/A(B)

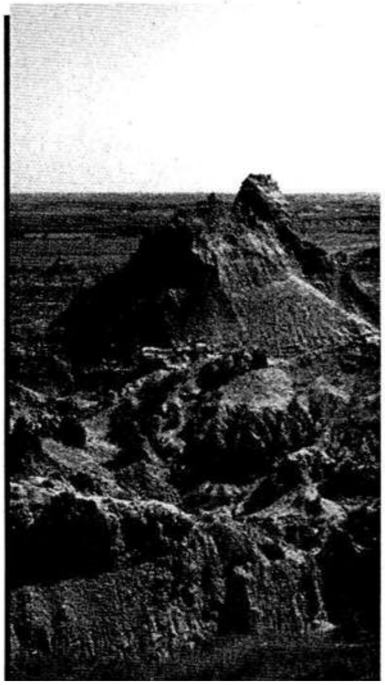
The planet Precipice has the dubious distinction of being the Federation world closest to the borders of the Klingon Empire. A planet ruled by a representative democracy, Precipice has an advanced, system-wide detection system that can warn the planet's inhabitants in advance of any threat from Klingon or other hostile foes. Otherwise, there is little to boast of on Precipice.



World Log: QUARREL

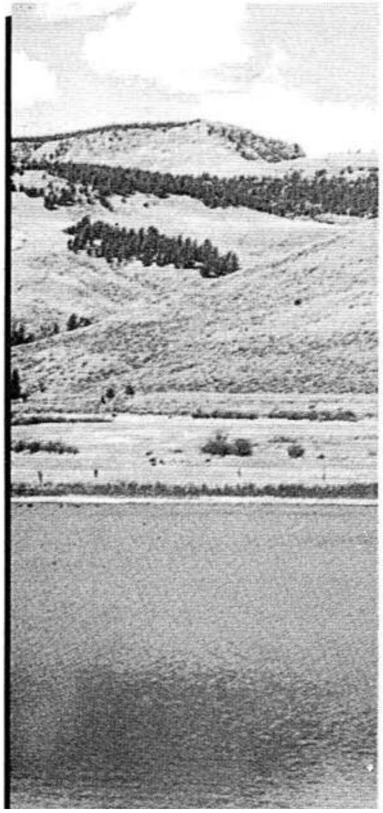
System Data	
System Name:	Wolf 515
Map Coordinates:	4.22S 0.12W
Number Of Class M Present:	1
Planetary Data	
Position In System:	VIII
Number Of Satellites:	0
Planetary Gravity:	1.1g
Planetary Size	
Diameter:	12,400 km
Equatorial Circumference:	38,000 km
Total Surface Area:	450,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	225,000,000 sq km
Planetary Conditions	
Length Of Day:	27 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	30%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace

A cultural oddity among Federation worlds, Quarrel is divided into numerous private preserves where individuals and groups can resolve combat under controlled circumstances. Owned and operated by the Alpha Centauri Center for Psychological Studies, this vast experimental laboratory allows individuals to express acute anti-social and/or aggressive behavior patterns without fear of bringing actual harm to themselves or to others. The Federation Science Council has netted important results from this planet, especially in understanding Andorian hostility complexes.



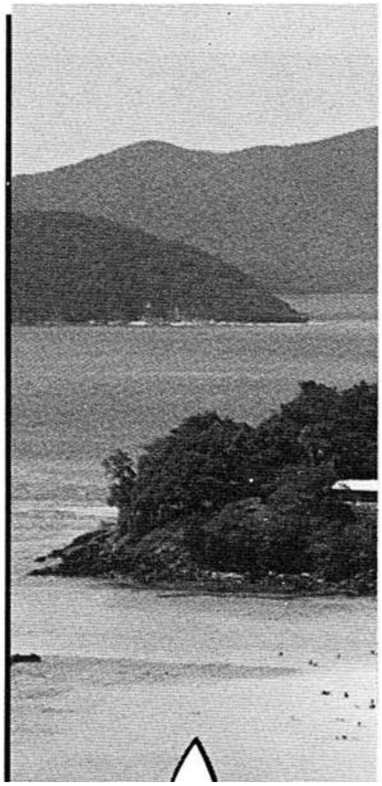
World Log: RALA III	
System Data	
System Name:	Rala
Map Coordinates:	4.22S 3.21E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	2
Planetary Gravity:	1.22g
Planetary Size	
Diameter:	18,700 km
Equatorial Circumference:	64,000 km
Total Surface Area:	750,000,000 sq km
Percent Land Mass:	10%
Total Land Area:	675,000,000 sq km
Planetary Conditions	
Length Of Day:	21 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	30%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	899985–97
Planetary Trade Profile:	BBDEEC/B(C)

Almost completely covered by water, this unique world has turned its natural deficit into a major advantage through automated ocean-based seafarming. Rala III currently maintains the largest concentrated seafarming project in the Federation. Annual yields of over 16 billion credits worth of seafood, grains, and mineral-rich products are harvested each year.



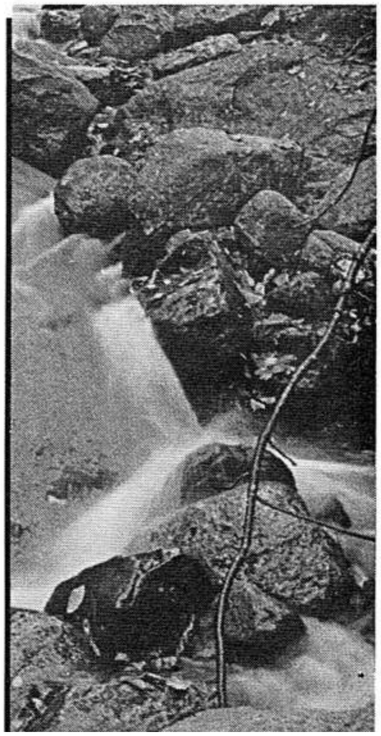
World Log: RASHILE	
System Data	
System Name:	Ungethiem
Map Coordinates:	8.81S 6.02E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IX
Number Of Satellites:	1
Planetary Gravity:	1.3g
Planetary Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq km
Percent Land Mass:	29%
Total Land Area:	190,000,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	2%
Radioactives:	11%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	999993–98
Planetary Trade Profile:	ADDDCDE/D(C)

A Terran-like planet, Rashile is owned and operated by a Federation corporation, Rashile Gourmet Foods Incorporated, which uses the planet's rich soil for Federation-wide food production. Workers and agricultural specialists from all parts of the Federation live and work on Rashile. Their interests are represented by a participatory council reporting directly to corporate headquarters.



World Log: RIVIERA	
System Data	
System Name:	Ochs
Map Coordinates:	2.22N 1.79E
Number Of Class M Present:	1
Planetary Data	
Position In System:	V
Number Of Satellites:	2
Planetary Gravity:	.95g
Planetary Size	
Diameter:	13,000 km
Equatorial Circumference:	41,000 km
Total Surface Area:	512,000,000 sq km
Percent Land Mass:	27%
Total Land Area:	138,240,000 sq km
Planetary Conditions	
Length Of Day:	19 Hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	26%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	35% Caitian 30% Human 35% Other
Technological/ Sociopolitical Index:	888885–88
Planetary Trade Profile:	BBCBCDC/B(B)

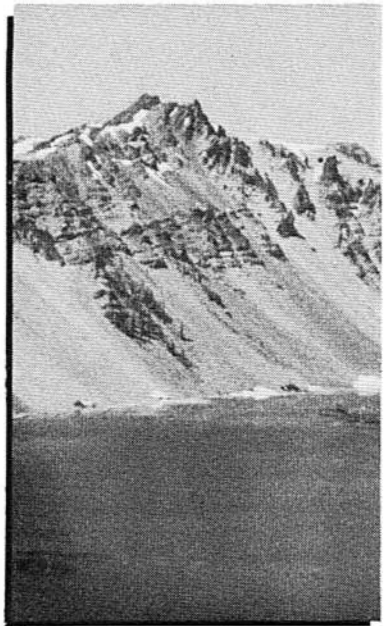
A tropical world owned by General Entertainment Concepts Corporation, Riviera is a favorite vacation spot for citizens throughout the Federation. As its name implies, Riviera is famous for its extensive network of beaches, its aquatic sports, and its home-away-from-home accommodations for dozens of different cultures and life forms. Though Lakeland has more fishing spots, Riviera compensates by having a more central location within Federation space.



World Log: SALAZAAR

System Data	
System Name:	Karnor
Map Coordinates:	3.77S 3.31E
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	3
Planetary Gravity:	1.12g
Planetary Size	
Diameter:	9,200 km
Equatorial Circumference:	29,000 km
Total Surface Area:	351,000,000 sq km
Percent Land Mass:	82%
Total Land Area:	287,820,000 sq km
Planetary Conditions	
Length Of Day:	28 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	50%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	50% Andorian 25% Alpha Centauri 25% Human
Technological/ Sociopolitical Index:	99998–98
Planetary Trade Profile:	AAAAAB/A(B)

The major starship design, construction, and testing center of the Federation, the orbital shipyards of Salazaar produce hundreds of military and commercial warp-driven vessels each year. This industrial and manufacturing world supports numerous Andorian, Centauran, and Terran investment companies devoted to the various facets of starship design and construction. Salazaar also maintains enormous optical and radio telescopes for galactic astronomical studies. The current population is well over 15 billion inhabitants, most of whom are contract technicians and scientists on loan from other Federation worlds.



World Log: SIGMA DRACONIS

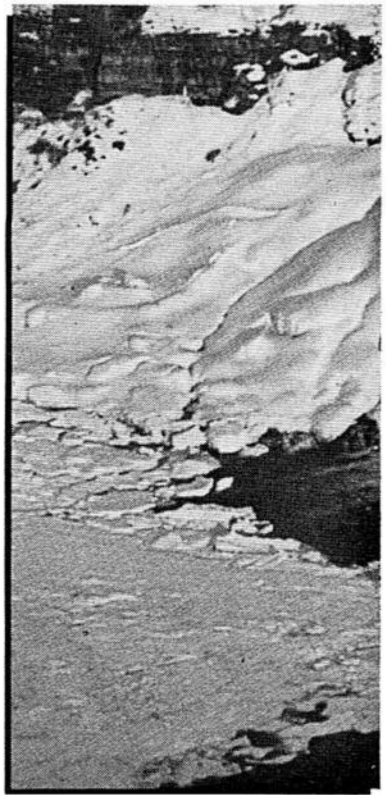
System Data	
System Name:	Sigma Beta 443
Map Coordinates:	2.02N 5.22E
Number Of Class M Present:	1
Planetary Data	
Position In System:	V
Number Of Satellites:	2
Planetary Gravity:	1.25g
Planetary Size	
Diameter:	10,400 km
Equatorial Circumference:	33,000 km
Total Surface Area:	405,000,000 sq km
Percent Land Mass:	70%
Total Land Area:	283,500,000 sq km
Planetary Conditions	
Length Of Day:	26 Hours
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	35%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Vulcan
Technological/ Sociopolitical Index:	888779–98
Planetary Trade Profile:	DDCCDDC/B(C)

A planet noted for its wide expanses and high surface temperatures, Sigma Draconis is also known for the variety of its avian life, the most spectacular of which is the Draconian air dragon. One of the more recent planets colonized by Vulcans, Sigma Draconis has several major cities in its southern hemisphere. It also has numerous universities and colleges devoted chiefly to the study of Vulcan and alien biologies. Star Fleet maintains a small support/repair facility on Sigma Draconis.

World Log: SPICA

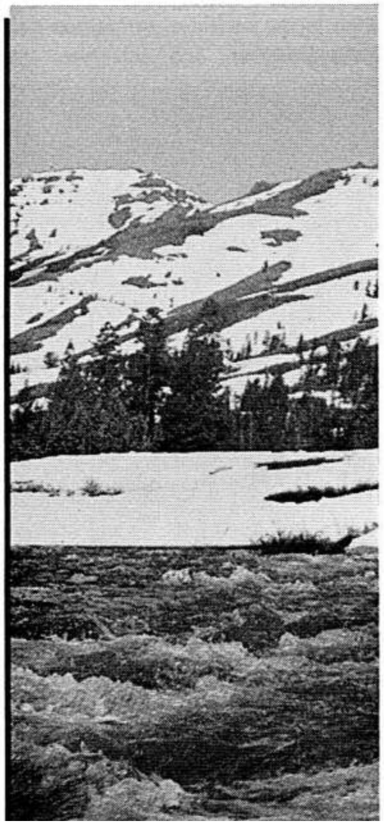
System Data	
System Name:	Juris Canopus
Map Coordinates:	0.35N 0.12E
Number Of Class M Present:	1
Planetary Data	
Position In System:	9
Number Of Satellites:	12
Planetary Gravity:	.80g
Planetary Size	
Diameter:	7,500 km
Equatorial Circumference:	11,500 km
Total Surface Area:	250,000,000 sq km
Percent Land Mass:	100%
Total Land Area:	250,000,000 sq km
Planetary Conditions	
Length Of Day:	18 hrs
Atmospheric Density:	Thin
General Climate:	Arctic
Mineral Content	
Normal Metals:	10%
Radioactives:	10%
Gemstones:	50%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	35% Tellarite 20% Human 45% Other
Technological/ Sociopolitical Index:	988985-99
Planetary Trade Profile:	BBCCDCCD(D)

A marginal Class M world, Spica is a small, insignificant planetoid. Its sole distinction is the abundance of naturally crystallized rock formations found nowhere else in the galaxy. Among these are the highly-prized Spican flamegems, small ruby-colored stones containing a liquid-mercury center. A number of Federation mining concerns prospect on Spica, which is otherwise uninhabited.



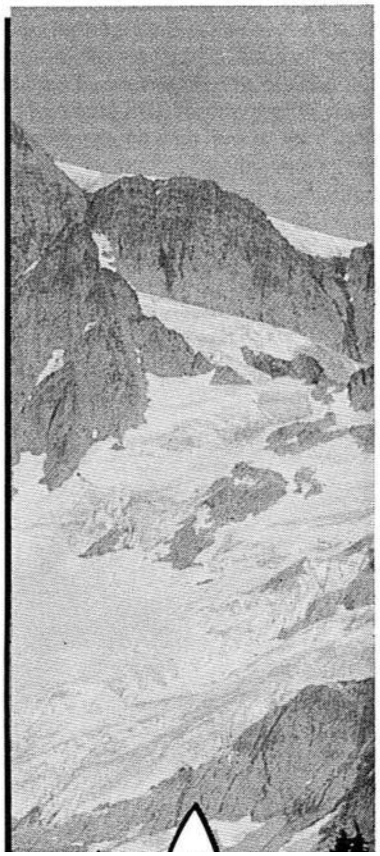
World Log: SUSTENANCE	
System Data	
System Name:	Sestarci 124
Map Coordinates:	0.07N 0.34E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VII
Number Of Satellites:	1
Planetary Gravity:	1.12g
Planetary Size	
Diameter:	10,450 km
Equatorial Circumference:	33,550 km
Total Surface Area:	412,000,000 sq km
Percent Land Mass:	48%
Total Land Area:	197,760,000 sq km
Planetary Conditions	
Length Of Day:	22 Hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Terrestrial
Mineral Content	
Normal Metals:	25%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Alpha Centauri
Technological/ Sociopolitical Index:	888987–87
Planetary Trade Profile:	BEEBDDC/B(C)

One of the Federation's major food producers, Sustenance grows the largest volume of annual crops in its quadrant. With a surface given almost entirely to mechanized farming, Sustenance grain and foodstuff sales amount to over 12 billion credits each year. It imports all its heavy machinery and technological needs in exchange for food shipments.



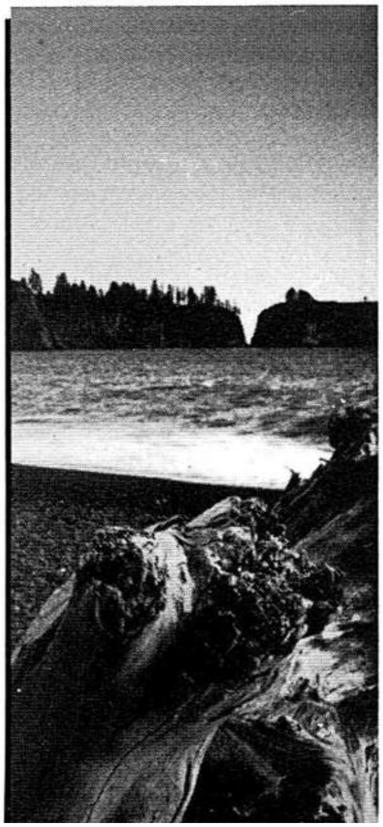
World Log: TALOS IV	
System Data	
System Name:	Talos
Map Coordinates:	7.49S 1.48E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	0
Planetary Gravity:	.89g
Planetary Size	
Diameter:	19,200 km
Equatorial Circumference:	60,000 km
Total Surface Area:	665,000,000 sq km
Percent Land Mass:	90%
Total Land Area:	595,500,000 sq km
Planetary Conditions	
Length Of Day:	29 Hour
Atmospheric Density:	Thin
General Climate:	Cold Temerate
Mineral Content	
Normal Metals:	60%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Talosian
Technological/ Sociopolitical Index:	49998A-99
Planetary Trade Profile:	Quarantined Planet

Discovered approximately 27 years ago, this world has not been completely surveyed, and so Star Fleet knows little about it. The results of Star Fleet's contact with the planet are classified. By order of the Secretary of Star Fleet, anyone who contacts Talos IV under any circumstances faces an automatic death penalty.



World Log: TELLAR	
System Data	
System Name:	61 Cygni
Map Coordinates:	1.49N 1.91W
Number Of Class M Present:	1
Planetary Data	
Position In System:	5
Number Of Satellites:	3
Planetary Gravity:	1.25g
Planetary Size	
Diameter:	8,500 km
Equatorial Circumference:	13,750 km
Total Surface Area:	280,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	140,000,000 sq km
Planetary Conditions	
Length Of Day:	20 hrs
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	20%
Gemstones:	10%
Industrial Crystals:	20%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Tellarite
Technological/ Sociopolitical Index:	998989–78
Planetary Trade Profile:	EAAGADG/A(A)

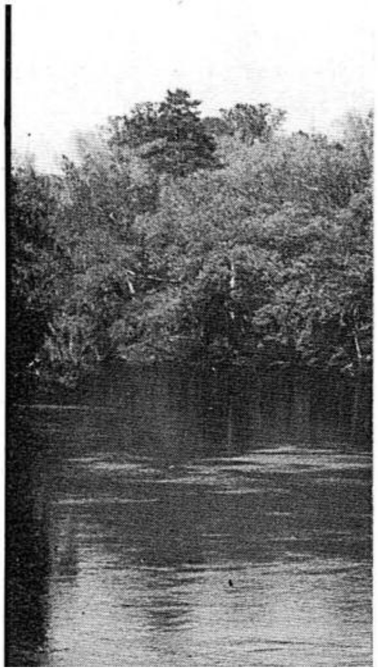
Tellar is the home of one of the few non-Human races to have achieved interstellar flight. Tellarites are quarrelsome by nature, more through love of competition than aggressivness. They are also the finest gamblers in the galaxy. Tellar is a permanent member of the Federation Council, and its current population is over two billion inhabitants.



World Log: TERRA

System Data	
System Name:	Sol
Map Coordinates:	1.23N 2.79W
Number Of Class M Present:	5
Planetary Data	
Position In System:	3
Number Of Satellites:	1
Planetary Gravity:	1.0g
Planetary Size	
Diameter:	9,845 km
Equatorial Circumference:	15,465 km
Total Surface Area:	304,517,000 sq km
Percent Land Mass:	60%
Total Land Area:	182,710,200 sq km
Planetary Conditions	
Length Of Day:	24 hrs
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	60%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	999999–88
Planetary Trade Profile:	DDDDDDD/A(A)

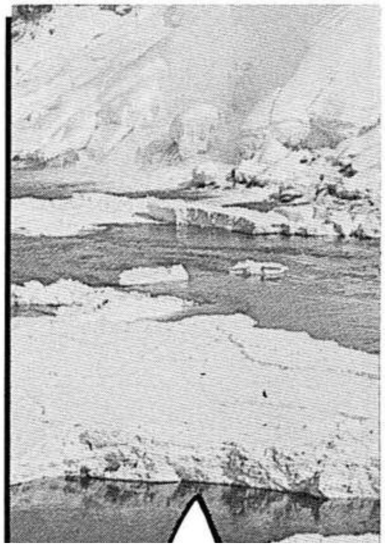
This planet is the home of Humanity, and is one of the founding worlds of the Federation. It is currently the leading cultural and scientific member of the Federation. Star Fleet Command is based here, as are numerous scientific and diplomatic centers. The Sol system also supports extensive Human colonies on Sol IV (Mars), Sol II (Venus), and several moons throughout the system. Terra is a permanent member of the Federation Council. Its current population (including the Luna satellite center) is over 10 billion inhabitants.



World Log: TIBURON

System Data	
System Name:	Beta Theseus
Map Coordinates:	6.02N 5.79E
Number Of Class M Present:	1
Planetary Data	
Position In System:	2
Number Of Satellites:	2
Planetary Gravity:	1.0g
Planetary Size	
Diameter:	9,700 km
Equatorial Circumference:	14,500 km
Total Surface Area:	280,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	140,000,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	60%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	
Cultural Data	
Dominant Life Form:	Tiburon
Technological/ Sociopolitical Index:	986676–67
Planetary Trade Profile:	BCBCCBC/C(C)

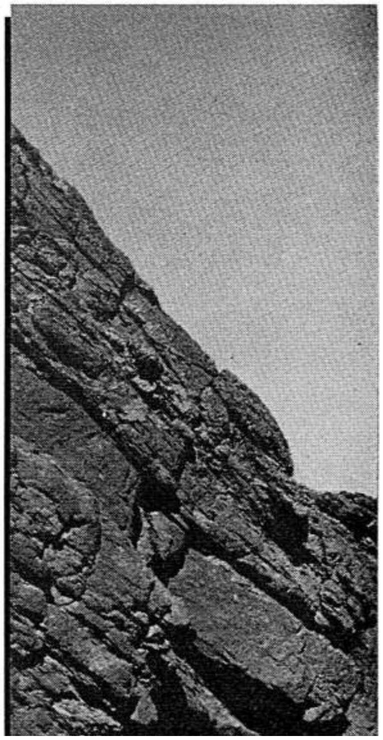
An associate member of the Federation, Tiburon is the home of a mutated Humanoid culture that may have escaped from Terra during the Eugenics Wars. Discovered only 60 years ago, Tiburon is a distant member of the Federation, lying near the current edge of the Federation-Gorn border. To all outward appearances, Tiburons are identical to Humans. However, Tiberons are able to change their gender at will, which is similar to the cellular metamorphosis of the Antosians. This ability may be the result of high levels of radiation from some time in the Tiberons' past. Nevertheless, their metamorphosis has produced a unique culture that views itself as a single extended family. Tiberons currently number over 700,000.



World Log: TRIACUS

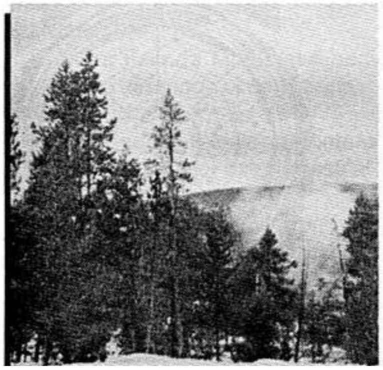
System Data	
System Name:	Alpha Lyrae
Map Coordinates:	2.66N 2.48W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IX
Number Of Satellites:	7
Planetary Gravity:	1.31g
Planetary Size	
Diameter:	18,100 km
Equatorial Circumference:	54,200 km
Total Surface Area:	712,000,000 sq km
Percent Land Mass:	75%
Total Land Area:	534,000,000 sq km
Planetary Conditions	
Length Of Day:	19 Hours
Atmospheric Density:	Thin
General Climate:	Cool Temperature
Mineral Content	
Normal Metals:	30%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	776777–78
Planetary Trade Profile:	CDCDFDD/D(D)

This world was once the center of a powerful pirate empire that disappeared without a trace approximately 350 years ago. Scientists and historians are uncertain whether Triacus was the homeworld of the Vegan Tyranny or if the Vegan Tyranny absorbed the Triacans during their rise to power. Aside from the numerous ruins being excavated by planetary archeologists, Triacus is used primarily for agriculture. Today, it supports the needs of numerous neighboring systems.



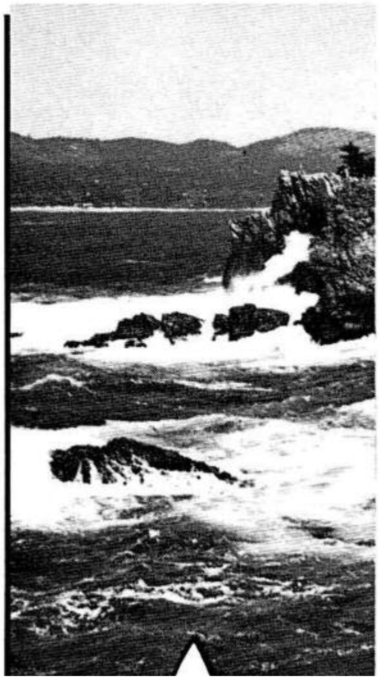
World Log: TROYIUS	
System Data	
System Name:	Tellum
Map Coordinates:	8.58S 4.98E
Number Of Class M Present:	2
Planetary Data	
Position In System:	V
Number Of Satellites:	2
Planetary Gravity:	0.92g
Planetary Size	
Diameter:	18,200 km
Equatorial Circumference:	45,000 km
Total Surface Area:	385,000,000 sq km
Percent Land Mass:	35%
Total Land Area:	134,750,000 sq km
Planetary Conditions	
Length Of Day:	22.75 Hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	12%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	15%
Special Minerals:	55%
Cultural Data	
Dominant Life Form:	Troyian
Technological/ Sociopolitical Index:	668877–75
Planetary Trade Profile:	ABCBCCB/D(C)

Troyius, one of two planets in the Tellun system, is the home of a Humanoid culture believed to be the descendant of a lost Andorian colonial expedition. Both of these planets, Elas and Troyius, are rich in dilithium deposits, which makes them of sensitive political and military concern to both the Federation and the Klingon Empire. Troyians are blue-skinned and show pronounced aggressive tendencies when aroused, though the civilization is mostly peaceful and technologically advanced. Using its crude interplanetary spaceflight capability, Troyius fought Elas to a draw in a major interplanetary war for dominion of the star system. The Federation sent negotiators to mediate the dispute, resulting in the marriage of the Elasian ruling family's daughter Elaan to the son of Troyius' current ruler. The region is now stable, despite Klingon attempts to incite further civil disturbances in hopes of securing both worlds' stores of dilithium crystals.



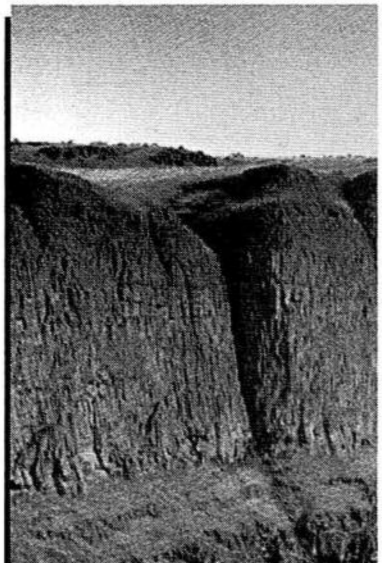
World Log: VEGA	
System Data	
System Name:	Alpha Lyrae
Map Coordinates:	2.66N 2.48W
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	1
Planetary Gravity:	.98g
Planetary Size	
Diameter:	9,000 km
Equatorial Circumference:	14,400 km
Total Surface Area:	315,000,000 sq km
Percent Land Mass:	50%
Total Land Area:	157,500,000 sq km
Planetary Conditions	
Length Of Day:	23 hrs
Atmospheric Density:	Terrestrial
General Climate:	Terrestrial
Mineral Content	
Normal Metals:	70%
Radioactives:	05%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	875886–87
Planetary Trade Profile:	BCBCCB/C(C)

Once thought to be the home planet of the Vegan Tyranny (some scholars point to Triacus), Vega posseses extensive ruins belonging to some sort of sentient life. Today, Vega supports a Human population of over five billion inhabitants, and serves as a major cultural and trade nexus between neighboring star systems. Vegan nightlife is among the most festive and exciting in the entire quadrant. Much of the planet's southern continent has been left undeveloped so that archeologists can study the origins of the planet's first inhabitants.



World Log: VULCAN	
System Data	
System Name:	40 Eridani
Map Coordinates:	0.09S 2.31W
Number Of Class M Present:	1
Planetary Data	
Position In System:	III
Number Of Satellites:	0
Planetary Gravity:	1.15g
Planetary Size	
Diameter:	9,700 km
Equatorial Circumference:	14,500,000 km
Total Surface Area:	300,200,000 sq km
Percent Land Mass:	75%
Total Land Area:	225,150,000 sq km
Planetary Conditions	
Length Of Day:	27 hrs
Atmospheric Density:	Thin
General Climate:	Warm Terrestrial
Mineral Content	
Normal Metals:	50%
Radioactives:	20%
Gemstones:	15%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Vulcan
Technological/ Sociopolitical Index:	999989–98
Planetary Trade Profile:	FBECAEF/D(B)

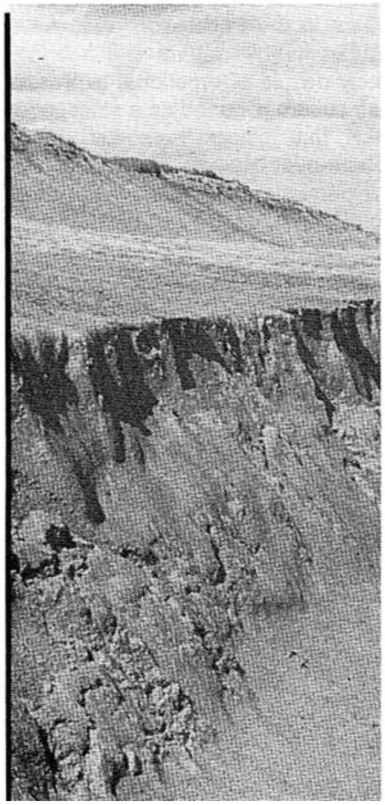
The home of the Vulcan race, Vulcan has a very high native gravity, a thin atmosphere, and high surface temperatures that created the familiar phrase "hot as Vulcan". The Vulcan race predates the rise of Humanity and is the second most commonly encountered in the Federation. The planet is home to the famous Vulcan Science Academy, one of the most lavish experimental and theoretical research centers in the Federation. Vulcans are vegetarians by nature and are completely devoid of emotional expression. Their culture is based on a strict code of ethics that places logic and rational thought over 'Human' emotions. Vulcan is a permanent member of the Federation Council.



World Log: WALL

System Data	
System Name:	Bahr
Map Coordinates:	8.92S 5.31E
Number Of Class M Present:	1
Planetary Data	
Position In System:	VI
Number Of Satellites:	2
Planetary Gravity:	1.2g
Planetary Size	
Diameter:	15,600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	610,000,000 sq km
Percent Land Mass:	70%
Total Land Area:	430,000,000 sq km
Planetary Conditions	
Length Of Day:	32 hrs
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	38%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Human
Technological/ Sociopolitical Index:	999992–97
Planetary Trade Profile:	HBFDEEA/A(B)

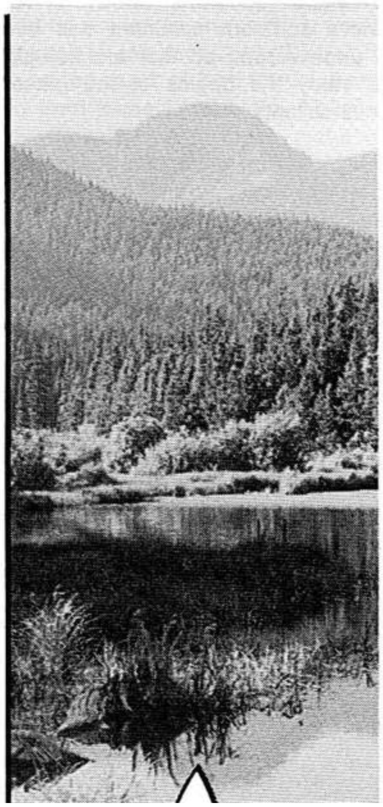
A mining and manufacturing world, Wall produces some of the Federation's most dependable orbital shuttle and transport craft. Although much of Wall's resources must be imported from off-world, the sale of hundreds of transport craft each year more than makes up for this trade deficit. A representative democracy, Wall is an associate member of the Federation.

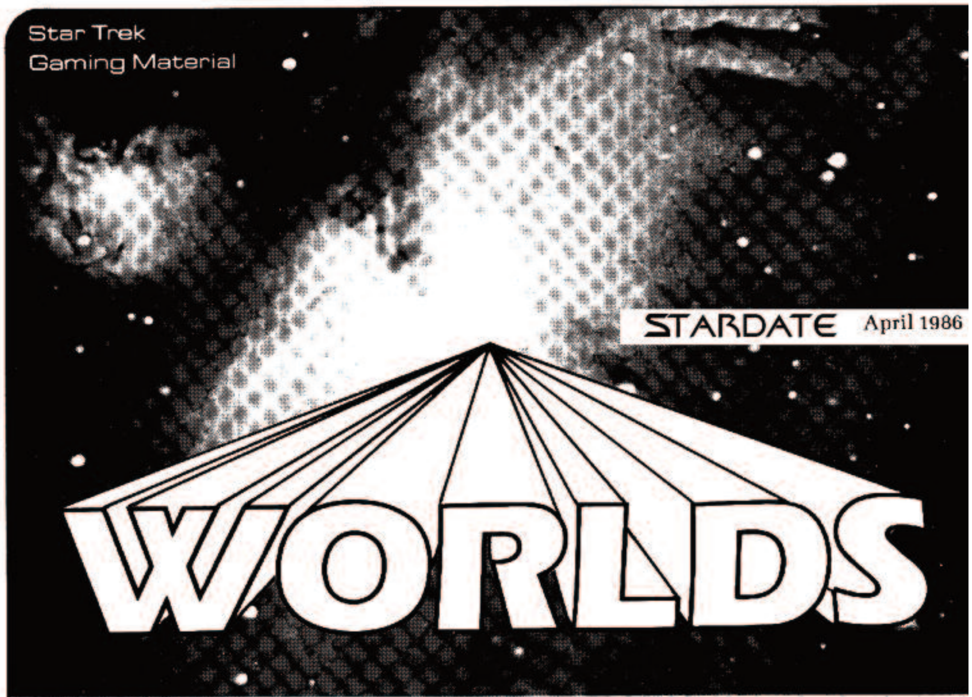


World Log: WRIGLEY'S PLEASURE PLANET

System Data	
System Name:	Sol
Map Coordinates:	1.23N 2.79W
Number Of Class M Present:	2
Planetary Data	
Position In System:	IV
Number Of Satellites:	0
Planetary Gravity:	1g
Planetary Size	
Diameter:	600 km
Equatorial Circumference:	850 km
Total Surface Area:	2,572 sq km
Percent Land Mass:	100%
Total Land Area:	2,572 sq km
Planetary Conditions	
Length Of Day:	24 hrs
Atmospheric Density:	Controlled Terrestrial
General Climate:	Controlled Terrestrial
Mineral Content	
Normal Metals:	90%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	None
Special Minerals:	None
Cultural Data	
Dominant Life Form:	60% Human 40% Other
Technological/ Sociopolitical Index:	None
Planetary Trade Profile:	ABDBBBB/A(C)

Established in Stardate 2/02 by an interstellar cartel of entertainment directors, Wrigley's Planet is actually a stray asteroid now located in orbit around Sol IV. Hollowed out and converted into a self-contained amusement center, this asteroid contains numerous parks and special theme centers reflecting a wide range of entertainments and diversions.





WORLDS of the Treaty Exploration Zone

A planetary Index of the ***Star Trek*** *Series*

by
Dale L. Kemper

illustrated by
Vincent Di Fate

The following is a complete listing of all the planets, systems, and galactic phenomena mentioned in the *Star Trek* TV and animated series (listed as "anim." in the index), as well as the three *Star Trek* films. This information has been gleaned from various *Trek* publications released over the past 15 years, and from the author's viewing of the syndicated episodes. This list has been compiled to further the background of the *Star Trek* universe and aid in the detailing of your adventure campaigns. Perhaps, sometime in the future, someone will come out with a detailed Galactic map and tell us where all these places are located. Most information listed is sketchy, at best, due to the limited information the dialogue of the series gave to most locations. Any additions and/or comments should be directed to STARDATE at the editorial offices' address given elsewhere in this issue.

Acadian Star System
This is where the mining planet Motherlode is located, which is rich in fissionable materials (anim. "Mudd's Passion").

Aldebaran III
Home to carbohydrate compounds used to slow down the degeneration of various types of plants ("Deadly Years").

Alfa 177
Location of a magnetic ore with strange properties. Also is known as a planet with a dangerously variable climate (night temperature drops to −250 degrees, Farenheit ("Enemy Within").

Alondra
Uninhabited planet outermost in the Pallas XIV System, eaten by a cosmic cloud (anim. "One of Our Planets is Missing").

Alpha Carinae II
A Class M planet containing a number of islands and major land masses ("Ultimate Computer").

Alpha Carinae V
Home of the love eating Drella ("Wolf in the Fold").

Alpha Centauri
UFP charter member, home of Zefrem Cochrane, creator of warp drive ("Metamorphosis").

Alpha Majoris I
Origination of the Milletus Cloud Creature ("Wolf in the Fold").

Alpha III
Planet where various precedents in Federation law were drawn up ("Court-martial").

Alpha Proxima II
Planet where various women were murdered by having their throats cut ("Wolf in the Fold").

Altair VI
Central world of a system just recuperating from interplanetary war ("Amok Time").

Amerind
Class M planet on which an advanced race established tribes of humans resembling American Indians ("The Paradise Syndrome").

Antos IV
Home of race who can change their shape to whatever they wish. Helped Garth of Izar when he was crippled in an accident ("Whom Gods Destroy").

Arachna
Spiderlike remnant of a supernova many light years across (anim. "Terratin Incident").

Arcanis
Noted point of interstellar navigation ("Arena").

Ardana
Home of the cloud city, Stratos, and origination of the substance called Zienite, a treatment for botanical plague ("Cloud Minders").

Argelius II
Favored shore leave planet by Starfleet due to the very friendly natives ("Wolf in the Fold").

Argo
Water planet once covered by land. Home of the surgically altered Aquan civilization (anim. "The Ambergris Element").

Argus X
An uninhabited planet with an abundance of Tritanium ore ("Obsession").

Ariannus
A planet which exports a number of agricultural products ("Let That Be Your Last Battlefield").

Arret
A dead planet hundreds of light years past explored territory, destroyed when its atmosphere was ripped away some half million years ago ("Return to Tomorrow").

Aurelia

Planet inhabited by intelligent, bird-like creatures (anim. "Yesteryear").

Axenar

A planet where Garth of Izar won a notable victory, later the site of peace talks ("Whom Gods Destroy").

Babel

Neutral planet that is the site of the Federation Conference on the admission of the Coridan planets ("Journey to Babel").

Benecia Colony

A planet with limited medical facilities and some cultural tastes ("Conscience of the King" and "Turnabout Intruder").

Barengaria VII

A planet inhabited with some dragon-like species ("This Side of Paradise").

Beta Antares IV

Planet where the cardgame "Fizzbin" is played ("A Piece of the Action").

Beta Aurigae

A binary system that has been studied for rare gravitational effects ("Turnabout Intruder").

Beta Canopus

A planet where the rare drug Strobalin occurs naturally (anim. "The Pirates of Orion").

Beta Geminorum

Minor star near the larger stars Castor and Pollux ("Who Mourns for Adonais?").

Beta Lyrae

Star system whose panoramic beauty has made it a major tourist attraction in the Federation (anim. "Slaver Weapon").

Beta Niobe

A star that went nova and destroyed the planet Sarpeidon, whose inhabitants escaped to their past to avoid the catastrophe ("All Our Yesterdays").

Beta Portalan

System which was attacked by flying parasites centuries ago, destroying the civilization there ("Operation: Annihilate!").

Beta VI

Colony to which the *Enterprise* sometimes delivers supplies ("Squire of Gothos").

Beta III

Planet in Star System S-11 which used to be controlled by the computer Landru ("Return of the Archons").

Beta XIIA

An agricultural colony of some 100 Federation citizens ("Day of the Dove").

Worlds, cont. from p. 27

Bezaride

Planet of the Pallas XIV Star System, endangered by an intergalactic cloud-being (anim. "One of Our Planets is Missing").

Camus II

Home of a long-dead civilization which is under study by a Federation archeological team ("Turnabout Intruder").

Stratos, the cloud city of Ardana.

Canopus

Star system that was the home of Phineas Tarbolde, a famous poet of the Federation ("Where No Man Has Gone Before").

Canopus III

Planet with fire breathing lizards on it (anim. "The Eye of the Beholder").

Capella IV

A planet rich in Topaline, a mineral used in life support equipment on some colonies. Also the homeworld of an honorable race of humanoid warriors ("Friday's Child").

Centauri VII

Home of Taranallus, a famous lithographer ("Requiem for Methuselah").

Cepheus

A star near the Arachna Region with a single planet in orbit around it (anim. "Terratin Incident").

Cerberus

Planet which was saved by Carter Winston when famine threatened the populace (anim. "The Survivor").

Cestus III

Planet that had the closest Human colony to Gorn space on it, destroyed by a Gorn cruiser ("Arena").

Ceti Alpha V

Planet of "exile" for Khan Noonian Singh and his followers, later laid waste by the explosion of Ceti Alpha VI in the same system ("Space Seed" & "Wrath of Khan").

Ceti Alpha VI

Unstable planet which exploded and changed the climate and atmospheric conditions of its neighboring planets ("ST II: Wrath of Khan").

Cheron

A dead planet destroyed by its inhabitants in pointless wars of prejudice ("Let That Be Your Last Battlefield").

Colony V

An inhabited planet at which the *Enterprise* occasionally makes stops ("Charlie X").

Coridan System

System containing a number of inhabited planets rich in dilithium crystals. Currently they are lobbying for admission to the Federation to protect themselves against Orion pirates and illegal mining operations ("Journey to Babel").

Corinth IV

Planet on which a Federation Star Base is located, identity number unknown ("Metamorphosis").

Cygnet XIV

A planet controlled by female technocrats. Some repair and refurbishment of Starfleet vessels is done here ("Tomorrow is Yesterday").

Cygnia Minor

A planet whose Federation colony is periodically threatened with famine ("Conscience of the King").

Daran V

Daran V
A planet with a Federation colony of some 3,724,000,000 inhabitants ("For the World is Hollow and I have Touched the Sky").

Delta Theta III
A Class M planet with reptilian sentient race (anim. "Bem").

Delta Triangle
A region of space where a number of strange disappearances of starships have occurred (anim. "Time Trap").

Delta Vega
An uninhabited planet near the edge of the Galaxy, it is the location of an automated Lithium Cracking Station ("Where No Man Has Gone Before").

Deneb II
Inhabited planet where Rejac struck in its reign of terror ("Wolf in the Fold").

Deneb IV
Inhabited planet known for its good shore leave potential ("Where No Man Has Gone Before").

Deneb V
Industrial planet where a new Academy of Sciences has been opened (anim. "Pirates of Orion" & "I, Mudd").

Deneva
A planet with a research colony of over one million inhabitants, invaded by flying parasites but saved by the *Enterprise* ("Operation: Annihilate!").

Dimorus
A planet inhabited by intelligent rodent-creatures ("Where No Man Has Gone Before").

Donatu V
A planet fought over by the Federation and the Klingons ("Trouble with Tribbles").

Dramia
Main planet in the Dramen Star System (anim. "Albatross").

Dramia II
Second planet in the Dramen Star System, hit by an Auroral plague that killed nearly all of its inhabitants (anim. "Albatross").

Eden
Fabled garden planet located in Romulan space, found to be uninhabitable due to its acid-based plantlife ("The Way to Eden").

Ekos
One of two planets in the M43 Alpha System governed by a militant fascist dictatorship due to Federation observers ignoring the Prime Directive ("Patterns of Force").

Elas
Inner planet of the Tellan System inhabited by a humanoid race of barbarians ("Elaan of Troyius").

Elba II
A planet with a poisonous atmosphere. Site of the Federation Asylum for the Criminally Insane ("Whom Gods Destroy").

Elysia
Area within the Delta Triangle region where a number of races have formed a peaceful government together within a 'Sargasso Sea' of derelict starships (anim. "Time Trap").

Eminiar VII
Planet in the star cluster NGC 321 which just recently ended its 500 year long interplanetary war with its neighbor Vendikar ("A Taste of Armageddon").

Epsilon IX
Space station on the Federation/Klingon border irretrievably broken down into data patterns by the V'ger Cloud ("STAR TREK: The Motion Picture").

Epsilon Canaris III
An inhabited planet that was on the verge of war at last report ("Metamorphosis").

Epsilon Indi
The Star about which the planet Triacus orbits ("And the Children Shall Lead").

Excalbia
A molten planet with a sentient lava-creature life form ("The Savage Curtain").

Exo III
A frozen world which once was the home of an advanced civilization, now being studied by Federation scientists ("What are Little Girls Made Of?").

Fabrini
A planet destroyed thousands of years ago but descendants of its inhabitants built an asteroid ship to escape ("For the World is Hollow and I have Touched the Sky").

Gamma Canaris N.
Small planetoid, probably a remnant of a larger planet, with conditions similar to Earth standard ("Metamorphosis").

Gamma 400 System
System where Starbase 12 can be found ("Space Seed").

Gamma Hydra IV
Earth-like planet near the Romulan Neutral Zone. Starbase 10 is the closest Federation establishment ("Deadly Years").

Gamma VIIA System
Solar system totally destroyed along with its billions of inhabitants, by a huge amoeba-like space creature ("Immunity Syndrome").

Gamma Trianguli VI
A planet that, until recently, was controlled by a gigantic computer complex called Vaal by the inhabitants ("The Apple").

Gamma II
An uninhabited planet with an automatic communications and astrogation station on it ("Gamesters of Triskelion").

Gamma Vertis IV
Planet inhabited by a race of empaths saved from destruction by a more advanced race ("The Empath").

Garo VII System
System containing the planet Pandro (anim. "Bem").

Genesis Planet
Artificial planet within the Mutara Nebula created by the unstable Genesis Effect, finally destroyed itself (*Star Trek II* & *Star Trek III*).

Gideon
A planet of immense overpopulation problems, solved by the introduction of a rare disease ("The Mark of Gideon").

Gorla
Planet within an alternate universe, rebelled against the evil Imperial Federation and was destroyed ("Mirror, Mirror").

Gothos
An artificial planet constructed for amusement by a child from an advanced race of energy beings ("The Squire of Gothos").

Guardian's Planet
Ancient planet of a long dead civilization which houses the Guardian of Forever time machine ("City on the Edge of Forever").

Hanson's Planet
Planet inhabited by large anthropoids, similar to those found on Taurus II ("The Galileo Seven").

Holberg 917G
A small planet rich in Rytalin, which is used to cure Rigellian Fever ("Requiem for Methuselah").

Icarus IV
A comet that can be found near the Romulan Neutral Zone ("Balance of Terror").

Terror").

Ilyria VI

Earth-type planet with a friendly, if gullible population (anim. "Mudd's Passion").

Iotia

A planet on the edge of the galaxy, whose culture resembles gangsters of the early twentieth century Earth due to accidental contamination by a visiting Federation vessel some hundred years ago ("A Piece of the Action").

Izar

Home of Star Fleet Captain Garth ("Whom Gods Destroy").

Talos IV, inhabitants have powerful mental techniques.

Janus VI

Site of an underground Pergium mining complex and home of the silicon based lifeform known as the Horta ("Devil in the Dark").

Kelva

Capital of the Kelvan Empire and located in the Andromeda Galaxy. Home to a race of huge creatures with hundreds of tentacle-like limbs who wish to conquer the Milky Way ("By Any Other Name").

Kzin

Planet whose feline inhabitants control 12 other systems, regulated by Federation authority due to their ferocious nature (anim. "The Slaver Weapon").

Lactra VII

Home of a race of intelligent slug-like creatures who have built a 'zoo' housing many varied lifeforms from throughout the galaxy. (anim. "The Eye of the Beholder").

Lavinius V

Home of an ancient civilization wiped out by flying parasites two centuries ago. ("Operation: Annihilate!).

L374-III

A planet destroyed by the Berserker robot ("The Doomsday Machine").

Makus III

A planet which the *Enterprise* sometimes delivers supplies to ("Galileo Seven").

Malurian System

Four planets orbiting Omega Cygni, whose four billion inhabitants were killed by the evolved Earth probe, Nomad ("The Changling").

Manark IV

Home of sandbats, which resemble rock crystals until disturbed ("The Empath").

Mantilles

Planet which orbits Pallas XIV with two others. The most remote inhabited planet in the Federation. Has 82 million inhabitants (anim. "One of Our Planets is Missing").

Marcos XII

A Federation planet with millions of inhabitants ("And the Children Shall Lead").

Marcus II

Planet in orbit around the star Marcus, once home of the famous artist Sten ("Requiem for Methuselah").

Martian Colony III

One of many settlements on the planet Mars in the Sol System ("The Lights of Zetar").

Megas-tu

Planet in another dimension located on the far side of our galaxy which is in a constant state of flux, due to the physical laws akin to magic that are natural here (anim. "The Magicks of Megas-tu").

Memory Alpha

A planetoid which houses the central library computers of the Federation. Damaged by alien attack, it is ► now being rebuilt ("The Lights of Zetar").

Merak II

A planet recently the victim of a botanical plague, stopped by the mineral Zienite ("The Cloud Minders").

Midos V

A planet with abundant raw material with a small Federation colony on it ("What Are Little Girls Made Of?").

Minara II

One of the inhabited planets orbiting the star Minara when it went nova. The empathic inhabitants were saved by a race called Vians ("The Empath").

M113

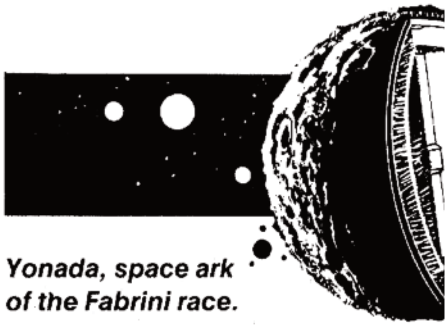
Planet which used to be the home of a race of salt eating creatures, now extinct ("Mantrap").

Motherlode

A large ringed planet in the Acadian Star System with a number of mining bases on it (anim. "Mudd's Passion").

M24 Alpha

A trinary star system 11.63 light years from Gamma II ("Gamesters of Triskelion").


Yonada, space ark of the Fabrini race.

Mudd's Planet

A K Type barren planet of androids who live underground and in a number of pressurized domes, vainly trying to figure out why they exist ("I, Mudd").

Murasaki 312

An electromagnetic phenomenon similar to quasars, located near the Taurus Star System ("Galileo Seven").

Mutara Nebula

Area of gas and dust and site of the short-lived Genesis Planet (*Star Trek III*).

Neural

Dry, rocky planet which is the home of primitive tribes, now warring amongst themselves due to Klingon/Federation interference ("A Private Little War").

New Paris

Federation colony recently attacked by a plague ("Galileo Seven").

Omega IV
Planet inhabited by descendants of Chinese Communists and Americans from Earth only just now learning to live in peace with each other ("Omega Glory").

Omega Cygni System
The star of the Malurian System of planets destroyed by the probe, Nomad ("The Changling").

Omicron IV
A planet almost destroyed by nuclear war, similar to Earth in the twentieth century ("Assignment: Earth").

Omicron Ceti III
Planet bombarded with deadly Berthold Rays, had to be abandoned as the site of an agricultural colony since a dangerous native plant infection was the only way to survive there ("This Side of Paradise").

Omicron Delta Region
A section of the galaxy where an advanced race has built an "amusement park" planet for themselves ("Shore Leave").

Ophiuchus VI
Federation colony where women are in great demand as settler's wives ("Mudd's Women").

Organia
Only Class M planet between Klingon sphere of influence and the Federation. Advanced energy beings forced both to make peace at the start of an interstellar war ("Errand of Mercy").

Orion
A planet in the Rigel Star System whose inhabitants are known for their piratical activities ("Journey to Babel").

Pallas XIV System
Double star system containing the planets Bezaride, Mantilles and the remnants of the planet Alondra attacked by a cosmic cloud (anim. "One of Our Planets is Missing").

Phylos
A planet on the edge of the galaxy, home of intelligent plant beings (anim. "The Infinite Vulcan").

Planet Q
Federation colony, last place the Koridian Players performed ("The Conscience of the King").

Platonius
A planet settled by 38 nearly immortal beings who have taken the culture of ancient Greece and made it their own ("Plato's Stepchildren").

Pollux IV
Class M planet some four billion years old, devoid of intelligent life ("Who Mourns Adonais").

Pollux V
Class M planet with no intelligent life ("Who Mourns Adonais").

Psi 2000
Frozen planet which disintegrated due to its internal imbalances ("The Naked Time").

Pyris VII
A frozen and barren planet in the Federation Exploration Zone ("Catspaw").

Quadrant 904
Empty area of space where the artificial planet Gothos was formed ("Squire of Gothos").

Rator III
Planet on the other side of the Romulan Neutral Zone (anim. "The Survivor").

Regula I
Deep Space Research Station orbiting a dead planetoid whose science team was killed by the hate crazed Khan Noonian Singh (*Star Trek II*).

Regulus System
Settled by humans and some alien races ("Menagerie").

Regulus V
Planet whose species called Eel Birds must return to the caves where they were born every eleven years to mate ("Amok Time").

Remus
Federation name for the twin planet of Romulus ("Balance of Terror").

Rigel II
A planet that is reportedly good for shore leave ("Shore Leave").

Rigel IV
Inhabited planet in the Federation ("Wolf in the Fold").

Rigel V
A planet whose inhabitants have a body chemistry similar to Vulcans ("Journey to Babel").

Rigel VII
A planet whose inhabitants are composed of primitive warring tribes ("Menagerie").

Rigel XII
A stormy planet rich in Dilithium Crystals currently mined by six inhabitants ("Mudd's Women").

Saturnius
A planet where the harem girls are nice to look at ("Mudd's Women").

Scalos
Technological planet whose inhabitants have been affected by radiation which accelerates their metabolism to the point that it is impossible to see them. The planet is currently quarantined until a cure for this affliction can be discovered ("Wink of an Eye").

Sector 39J
A section of the galaxy where the 11,000 mile long space amoeba was encountered ("Immunity Syndrome").

Sherman's Planet
A Class M world near Deep Space Station K-7 being developed by the Federation to keep the Klingons from taking control of it ("The Trouble with Tribbles").

Shore Leave Planet
Planet built by an advanced civilization for their amusement ("Shore Leave").

Sigma Draconis
A Type G9 star with nine planets, three of them Class M and inhabited by intelligent life ("Spock's Brain").

Sigma Draconis III
Inhabited planet with a civilization similar to earth circa 1485 A.D. ("Spock's Brain").

Sigma Draconis IV
Class M planet whose civilization is as advanced as Earth in 2030 A.D. ("Spock's Brain").

Sigma Draconis VI
Glaciated planet that once was the home of an advanced civilization, now only remnants of it remain living underground ("Spock's Brain").

Sirius IX
Federation planet whose inhabitants have an unusual biochemistry ("Mudd's Passion").

Skorr
The planet of a warlike intelligent avian race, who recently learned to live in peace (anim. "Jihad").

Solar System L370
A system of seven planets, all of which were destroyed by the Berserker robot ("Doomsday Machine").

Solar System L374
All but the two innermost planets destroyed by the Berserker ("Doomsday Machine").

Star Base 2 ►

Star Base 2
Fully operational base somewhere between Beta Aurigae and Camus II ("Turnabout Intruder").

Star Base 4
The nearest base to Triacus and Cheron ("And The Children Shall Lead" & "Let That Be Your Last Battlefield").

Star Base 6
Near Sector 39J ("Immunity Syndrome").

Star Base 9
Closest Star Base to Pyris VII ("Catspaw").

Star Base 10
Near the Federation/Romulan Neutral Zone and Gamma Hydra IV ("The Deadly Years").

Star Base 11
Nearest Star Base to Talos IV ("Menagerie").

Star Base 12
On a planet in the Gamma 400 System, nearest Star Base to Pollux ("Space Seed" & "Who Mourns Adonais").

Star Base 23
Nearest Star Base to the Arachna supernova (anim. "Terratin Incident").

Star Base 27
Near the Omicron Ceti System ("This Side of Paradise").

Star Cluster NGC 321
Location of the planets Vendikar and Eminiar VII ("A Taste of Armageddon").

Talos IV
Fourth in an eleven planet system, inhabited by the remnants of a civilization which destroyed itself. General Order Number Seven forbids any contact with the inhabitants and their powerful mental techniques ("Menagerie").

Tantalus V
Site of a Federation Penal Colony ("Dagger of the Mind").

Tarsus IV
Federation colony that was the site of the Kodos massacre some twenty years ago ("Conscience of the King").

Tau Ceti
Planet where an early battle between Romulan and Federation forces was fought ("Whom Gods Destroy").

Taurus II
Barren planet inhabited by primitive twelve foot tall anthropoids ("Galileo Seven").

Tellun Star System
Near the Klingon/Federation border, this star system contains two planets; Troyius and Elas, now at peace due to a planned royal wedding ("Elaan of Troyius").

Thasus
A Class M planet inhabited by noncorporeal entities of energy and thought patterns ("Charlie X").

Theta Cygni XII
Planet whose civilization was destroyed by flying parasites ("Operation: Annihilate").

Theta VII
A planet to which the *Enterprise* sometimes delivers supplies ("Obsession").

Tiburon
Site of experiments on subject tribes by the evil Zora ("The Savage Curtain").

Triacus
A planet in orbit around Epsilon Indi and site of the ill-fated Starnes expedition ("And The Children Shall Lead").

Triskelion
A planet of the trinary sun M24 Alpha, once the home of a technologically advanced race ("Gamesters of Triskelion").

Tycho IV
A dead world whose only lifeform is a "vampire" cloud that feeds on human red blood cells ("Obsession").

Typerias
A planet where a coagulation sand exists that stops bleeding ("A Private Little War").

Ursula
Planet of the Ursalian Neopoppy, with antihallucinogenic properties ("A Private Little War").

Vega IX
A Federation colony near the Rigel System ("Menagerie").

Vendikar
Third planet in the Eminiar System, once at war with its neighbor, Eminiar VII ("A Taste of Armageddon").

Verdanis
An Earth-like planet where the lost colony of the Terratins are placed after being rescued from a planet orbiting Cepheus (anim. "Terratin Incident").

Yonada
A two-hundred mile diameter asteroid hollowed out for use as a space ark by the Fabrini race when they discovered their sun going nova. Currently nearing a planet which may support colonization. ("For The World Is Hollow And I Have Touched The Sky").

Zeon
The outer of two planets of M43 Alona, almost invaded by their companion planet Ekos ("Patterns of Force"). ★

APPENDIX—Star System Data **Gathered from Star Trek Maps**
Some duplication may occur

The following pages provide a brief description of some of the more interesting star systems in and near Federation Space; emphasis is placed on the systems and planets visited during the voyages of the U. S. S. *Enterprise*. The systems are arranged alphabetically, according to their most common names (or those of the principal planets, if the system name is not widely used). Cross-references are given where other names are in current use, and to the previously used constellation nomenclature as well. In some instances, where no proper name has been given to a star system, the constellation designation or a survey number such as the United Federation Catalog (UFC) number is used to identify the system. If the reader is interested in more detailed information on any of the systems described below, the appropriate orientation manual (CM:7XXXXX series publications) should be obtained.

Whenever possible, humanoid cultures are rated on the Richter scale. This scale of cultural development runs from nomadic hunters (A−) to advanced technological civilizations (H+). It provides a quick idea of the social and technical development of a planet. For those interested, a more detailed description of the scale can be found in *Comparative Planetary Anthropology* by Dr. C. J. Richter (SM:000381).

ADHARA [Epsilon Canaris] (−119.0, 105.3, −145.4)

A blue-white giant in a binary system with ten planets and class 2 facilities, Epsilon Canaris (a contraction of the ancient Canis Majoris) supports a large humanoid population on the third and fourth planets, both rating 16 on the Industrial Scale. Although not a UFP member, a Federation embassy has been established on the neutral second planet in the system to prevent a possible interplanetary conflict. Pop: 4.3 billion

ALBIREO [Beta Cygni] (86.8, −67.4, −31.7)

Also known as Cygnia Minor, this is a yellow giant in a triple system (the other two stars are a moderate blue star and a white dwarf), and supports a system of six planets with class 1 facilities. The second planet is Class M, and is the site of a Federation colony established c. 2195. The white dwarf proved to be a variable with a period of 27 years, and planet-wide famine was common during the episodes of high radiation until synthetic foods were developed to withstand these periodic episodes. Pop: 125,000

ALDEBARAN [Alpha Tauri] (10.6, 56.5, −15.1)

Located on the third planet of four orbiting an orange giant in a binary star, the Aldebaran Colony is a major Federation port, with class 3 facilities. The system also contains a red dwarf star orbiting the primary at 97.5 billion kilometers. The New Aberdeen Naval Yards are the sixth largest in the Federation, and the unspoiled wilderness is a popular tourist attraction. A small native population (under one million) is centered around New Aberdeen, which also has a Star Fleet supply center and several private shipyards. Native life, such as the delicious Aldebaran shell-mouth, is generally simple.

ALFA 177 (−36.3, −52.6, −56.7)

The second planet of three orbiting a white dwarf (class 0 facilities), Alfa 177 is only marginally Class M: it has a rotation period of 37 hours, and the surface temperature reaches a nightly low of −160°C. Surprisingly, native life has adapted to the extreme cold, including a species of horned dog-like animals (*Canis Alfa*).

Warning W-399

Certain indigenous ores have been found to possess peculiar magnetic properties, and may interfere with the normal ion-phasing of transporter beams. Inanimate test objects should be transported before any personnel are allowed to beam down.

ALPHA (28.5, 52.8, 19.0)

Alpha III is a system of five planets orbiting a moderate size yellow star (class 2 facilities), is a Federation Member, and one of the seven members of the Federation's security council. Established in the 22nd Century as colony Terra Four, the Statutes of Alpha III is considered to be the most important political document since the Fundamental Declaration of the Martian Colonies, and provided for an independent star system modeled loosely after Plato's "Republic." Pop: 179 million

AL NATH [Beta Tauri] (−66.5, 47.4, 8.1)

A blue giant orbited by thirteen planets (class 0 facilities), the second of which is Class M. The dominant life-form on Taurus II is an anthropoid, about 2.5 meters in height and extremely hostile. Pop: 145 million

ALPHA AQUILAE	*see: ALTAIR*
ALPHA AURIGAE	*see: CAPELLA*
ALPHA BOOTIS	*see: ARCTURUS*
ALPHA CARINAE	*see: CANOPUS*
ALPHA CENTAURI	*see: AL RIJIL*
ALPHA CYGNI	*see: DENEB*
ALPHA LYRAE	*see: VEGA*

ALPHA MAJORIS (−154.5, −17.5, −73.6)

A system of two planets orbiting a red giant (class 0 facilities), Alpha Majoris has no corporeal native life. The first planet is the home of the Mellitus, a semi-intelligent plasma-based creature. Discovered c. 2215, the star system is at present uninhabited.

ALPHA PROXIMA (142.4, −99.1, 42.1)

One of the first extra-solar colonies established, Alpha Proxima is the second planet of twelve orbiting a yellow star (class 3 facilities). The port city of Heliopolis has a population in excess of 3 million, and the planet has a total population of almost 12 million. Major industries include mining and farming, as well as sea-farming in the planet's major oceans.

ALPHA SCORPII	*see: ANTARES*
ALPHA TAURI	*see: ALDEBARAN*

AL RIJIL [Alpha Centarui] (24.6, 62.5, – 1.0)

A triple system, with seven planets orbiting a pair of yellow stars. The third star is a red dwarf. The fourth, fifth, and seventh planets are Class M, and all support humanoid life (class 4 facilities). The seventh planet was already inhabited when the system was first explored by the starliner *Enterprise* in 2039, apparently by descendants of ancient Greeks transported from Earth (Sol III) in the third century B. C. This planet became the home of Zefram Cochrane in his later years, until his disappearance on his last voyage in 2089. Alpha Centauri was one of the five founding systems of the Federation, and now supports a population of 21 billion—second only to the Sol system.

ALTAIR [Alpha Aquilae] (27.9, 59.8, 2.5)

A white star orbited by eight planets (class 2 facilities), two of which (IV and VI) are inhabited by a native humanoid population rating H on the Richter Scale of Cultures. The two worlds have recently ended a decade-long civil war, and a single system president now governs both worlds. A Federation embassy has been established on the sixth planet. The fourth planet is also of archeological interest for the ruins of the Krell civilization that flourished there millions of years ago. Pop: 7 billion

AMERIND (– 93.5, – 157.6, – 166.2)

The fourth planet of eight circling a yellow star, Amerind is a Class M world inhabited by the descendants of American Indians taken from Earth (Sol III) thousands of years ago by an advanced culture known only as the Preservers. Pop: 18.3 million

Danger D-868

The Amerind system is located in a dense asteroid cluster, and planetary debris is traveling through the system on uncharted trajectories. Spacecraft should exercise due caution when approaching.

ANDOR [Epsilon Indi] (25.8, 60.1, – 2.4)

An orange dwarf with nine planets (class 3 facilities), Epsilon Indi is the home world of the Andorian race, an insectoid species that was the third intelligent civilization contacted by man. Although in a feudal state when contacted, approximately D+ on the Richter Scale, the Andorians quickly assimilated Earth technology, and are now a major Federation member. In addition to the Andorians, who evolved on the eighth planet, Epsilon Indi III, or Triacus, was once the seat of a pirate empire, composed of several humanoid cultures, that became extinct shortly before the Vegan Tyranny. Triacus, although Class M, is uninhabited. Pop: 17.2 billion

ANTARES [Alpha Scorpii] (172.1, 118.9, – 13.9)

A binary system consisting of a red giant primary and a small yellow secondary (class 0 facilities), Antares supports a total of nine planets, four orbiting the primary and five the secondary. Neither system is inhabited, but both support a number of interesting life-forms, such as the Antarean dryworm. Antarean "glow water," the dryworms suspended in a liquid environment, is a popular trade item.

ANTOS (18.1, – 20.4, – 6.1)

A yellow giant with five planets, with the fourth being Class M (class 0 facilities). Antos is the home of a humanoid race that is considerably older than mankind and has little interest in contact with the Federation. Like the Vendorians, the inhabitants of Antos IV have perfected the technique of cellular metamorphosis, and can rearrange their cellular structures to imitate that of any object of about the same size and mass. The Antosians have not been extensively studied, but their population appears to be under 100,000.

ARCTURUS [Alpha Bootis] (27.6, 70.4, 6.6)

An orange star with five planets (class 1 facilities), Arcturus supports a humanoid population on its fourth planet roughly comparable to Elizabethan England (Approximately C – on the Richter Scale). Arcturian mode of dress and dramatic conventions have been adopted by many Federation cultures. Pop: 350 million

ARDANA [Mu Leonis] (8.5, 106.3, 9.8)

A Federation member, Ardana is the third planet of three circling Mu Leonis A, a red star in a binary system (class 1 facilities). Ardana's humanoid population, contrary to native tradition, is probably not native; early colonists, rather than endure life on the planet's inhospitable surface, constructed the remarkable antigravity city of Stratos. Unfortunately, the ground dwellers, or "troglytes", were forced to undergo a separate and unequal evolution in the zeinite mines, and the planet now supports two widely disparate castes. The caste differences are now being eliminated at Federation request. Pop: 600,000

ARGELIUS (– 154.7, – 59.2, – 121.2)

The second planet of ten orbiting a yellow star in a binary system, Argelius II (class 2 facilities) is well known for its hospitality and for the peaceful nature of its inhabitants. Since their Great Awakening two centuries ago, Argelians have deplored violence, and welcome space travelers of any affiliation. Pop: 1.7 billion

ARGUS (– 9.0, – 99.8, 69.0)

A white dwarf with ten planets (class 0 facilities), Argus is remarkable only for the native "vampire cloud," a non-corporeal life-form that evolved on the barren tenth planet. The atmosphere of Argus X was recently torn away by an anti-matter explosion.

ARIANNUS (– 30.7, 57.6, – 20.4)

The fourth planet of seven orbiting a yellow star, Ariannus is a farm world, supplying agricultural produce to many nearby worlds. Ariannus supports a modest population of under a thousand, composed mainly of farmers (class 2 facilities).

ARRET (– 36.1, – 136.3, – 98.5)

The first planet of an orange star (class 0 facilities), Arret was Class M until its atmosphere was torn away, rendering the surface uninhabitable. Subsurface ruins suggest that an advanced humanoid civilization once flourished in this system, and ancient records name four inner planets that no longer exist. It is thought that the star was originally a yellow dwarf much like Sol, and became a nova millions of years ago.

AXANAR (– 51.5, 5.2, – 8.1)

The first planet of three orbiting a yellow dwarf (class 1 facilities), Axanar supports a primitive native population (D – on the Richter Scale) that allied itself with the Klingon Empire during the Four Years War in the 2240's. Efforts by the Klingons to construct a naval base on Axanar resulted in the famous blockade of the system by Captain Garth; later, the Axanar Peace Mission established the current Federation-Klingon border, and insured the neutrality of Axanar. Pop: 150 million

BABEL [Wolf 424] *(24.2, 66.1, 0.8)*

Babel is the code name for a planet about 4,200 km in diameter, the largest of several dozen, circling the red dwarf Wolf 424 (class 1 facilities). Chosen for its central location, Babel became the site of a conference to evaluate the Coridan system's application for Federation membership in 2262. Babel was terraformed for humanoid habitation, and since then plans have been approved for a permanent conference facility on the planet.

BENECIA *(−0.6, −59.7, −313.0)*

This system, eight planets around a small blue star, supports a small human colony on the third planet (class 1 facilities). Chief industries are forestry and exportation of native raw materials; the colony has a number of small villages, but its population of 12,500 is widely distributed over two major continents.

BERENGARIA *(−21.4, −51.8, −60.3)*

A giant red star orbited by thirteen planets (class 0 facilities), Berengaria has no sentient life, although many life-forms inhabit the seventh and eighth planets. The dominant species on Berengaria VII, a flying dragonlike reptile, may eventually evolve intelligence.

BETA AURIGAE see: *Menkalina*
BETA CYGNI see: *ALBIREO*
BETA GEMINORUM see: *POLLUX*

BETA NIOBE *(−73.1, −166.7, −210.1)*

Formerly a large yellow star with five planets and one inhabited world, Sarpeidon, Beta Niobe became a nova in 2263.

Danger D-549

Novae emit intense radiation that can be lethal to humanoid life. Spacecraft should avoid passing within ten parsecs of this star.

BETA OPHIUCHI see: *CHELEB*
BETA ORIONIS see: *RIGEL*

BETA 6 *(−109.1, −106.3, −74.2)*

A system of seven planets orbiting the secondary star in a double system, the Beta 6 Colony is located on the sixth planet of a moderate yellow star. Established in 2195, Beta 6 is now a thriving humanoid colony (primarily human and Andorian) with class 1 facilities and a population of 87,000.

BETA TAURI see: *AL NATH*

BETA XII—A *(−195.0, 61.7, −54.3)*

The site of an experimental agricultural colony (class 1 facilities), Beta XII—A is one of two worlds in a trojan orbit around a common center of gravity (the Earth-Luna system is another example of such a trojan orbit). Beta's primary is a dim orange star, and has a total of thirteen planets. Pop: 112

CAMUS *(−55.0, −62.8, −360.2)*

An orange star with four planets (class 0 facilities), Camus was once the site of an advanced civilization that apparently never developed space flight, although it excelled in sciences previously unknown to the Federation. The second planet is Class K, approximating Mars conditions, and has extensive surface ruins.

CANOPUS [Alpha Carinae] *(15.4, 63.7, −28.7)*

A bright yellow-white star with eight planets (class 1 facilities), Canopus has developed life on three of its planets, and intelligent life on two. Canopus III, a low gravity world, is the site of an advanced technological civilization that evolved from birdlike ancestors; the inhabitants of this world recently attained interstellar travel, although application has not been made for Federation membership. Canopus II is inhabited by primitive aborigines, rating approximately A+ on the Richter Scale. Canopus V has a number of interesting life-forms, including the Drella, a small koala-like animal that is sensitive to human emotions. Total system population: 3.7 billion

CAPELLA [Alpha Aurigae] *(11.1, 60.0, 4.6)*

This system contains four stars. Two of them are yellow stars forming a binary pair. They are orbited at a distance of 0.17 light-year by a binary pair of the other two stars, red dwarfs. The only inhabited planet in the system is the outermost of four orbiting the central yellow binary pair. A Class G desert world, Capella IV has a small population of nomadic humanoids, generally believed to be the descendants of the Ceres expedition lost in 2084. This planet supports a number of other chordate life forms, including the vicious Capellan power cat. Pop: 4,100.

CESTUS *(−44.2, −169.1, −113.9)*

Fourteen planets orbit this blue star (class 2 facilities), and a Federation colony and support base was located on the third planet. The entire population of 178 colonists was destroyed in a recent Gorn attack. Construction of a new base has been delayed pending a peace treaty with the Gorn Hegemony.

CHELEB [Beta Ophiuchi] *(56.2, 65.7, 20.1)*

The sixth planet of nine orbiting Beta Ophiuchi, an orange supergiant (class 1 facilities), is a Class M world that supports a small pergium mining colony commonly known as the Ophiuchus Colony. Pop:28

CORIDAN *(29.7, 64.3, 29.9)*

The Coridan system has a total of four inhabited worlds, more than any other system except for Rigel and Sol. The humanoid life-forms native to Coridan evolved on the third world of a system of ten planets orbiting a red dwarf (class 1 facilities). After the development of interplanetary flight, colonies were established on the fourth, seventh, and ninth planets, Class M, F, and G worlds respectively. Rich dilithium deposits were recently discovered on Coridan IX, the most thinly-populated planet in the system. Total pop: 790 million

Warning W-223

The Coridan system is not at present a member of the United Federation of Planets. Special regulations govern the entry of Federation spacecraft to this system.

CYGNET *(54.5, −30.0, −22.4)*

A binary system consisting of a blue-white giant and a red dwarf, Cygnet supports fifteen planets, and one inhabited Class M world (Cygnet XIV). A Federation member, Cygnet XIV is a highly advanced technological world with a matriarchal society (Cygnian males are only semi-intelligent). Cygnet has a Star Fleet support base with class 3 facilities, run entirely by females.

CYGNIA MINOR see: *ALBIREO*

DARAN (−127.5, −139.2, −19.7)

A moderate orange star orbited by ten planets (class 3 facilities), Daran is a Federation member with a humanoid population of 3.7 billion on the fifth planet. Originally an Earth colony, Daran has a large Deltan and Tellarite population as well, and is a major industrial center in a relatively unpopulated quadrant.

DELTA DORADO see: *GIDEON*

DELTA VEGA (140.9, 47.7, 187.8)

A white dwarf on the northern fringe of the galaxy, Delta Vega has only one planet, a Class F world with only primitive life and a primordial atmosphere. An automated dilithium cracking station is located on this world, and ore ships call only once every twenty years; the system has class 1 facilities that are totally automatic.

DENEB [Alpha Cygni] (142.7, −143.4, 382.5)

A major star system with a population of over 29 billion, Deneb ranks with Sol and Rigel as one of the major cultural centers of the Federation, and its location above the galactic ecliptic makes it one of the most remote of Federation members. A system of five planets orbiting a white supergiant in a binary system (class 4 facilities), planets II, IV, and V are Class M and support intelligent life. Deneb III is Class N, and has several interesting non-sapient life-forms. Deneb II has an advanced native population with a population of about 1.8 billion, and is on the verge of interstellar flight, with a Richter rating of G−. Deneb IV has a small Federation colony (Pop. 17,000) and supply base, but is largely unspoiled wilderness. Deneb V is the most heavily populated world in the system, and is a major Federation port with a Star Fleet training center, extensive naval yards, and the newly-opened Academy of Sciences. Originally a colony of Deneb II, it still supports a large Denebian population.

DENEVA (45.8, 52.8, 96.9)

The third planet of seven orbiting a moderate white star, Deneva was colonized in the 2160's as a trading base between the mineral-rich Denevan asteroid belts and the Federation industrial worlds. It now has a human population of over 1 million, mostly centered around the port city of New Sacramento, and is still the home system of several interstellar freight lines (class 2 facilities).

DIMORUS (−26.7, −18.8, −27.9)

The fourth planet of eight orbiting a pair of moderate orange stars (class 0 facilities), Dimorus has a native population of intelligent rodent-like creatures which rate about C− on the Richter Scale. Extreme xenophobes, they have attacked several Federation contact teams, and the planet has been placed under quarantine until further notice.

EDEN (−146.6, −190.1, 2.8)

Originally a world of mythical beauty described by shipwrecked survivors of the Romulan War in the 2160's, Eden was recently identified as the only planet of a moderate white star (UFC 3676543) with class 0 facilities in the Romulan Neutral Zone. It has no animal life, and the native flora has been found to contain extremely corrosive acid.

Prohibited P-091

Entry into the neutral zone by any Federation vessel is a violation of interstellar treaty, and is expressly forbidden.

ELBA (−18.3, −119.4, −7.1)

A white dwarf binary with two planets (class 1 facilities), the Elba correctional facility for the incurably insane is located on the second planet. Since the planet is Class F with a poisonous atmosphere, the facility is located inside a pressure dome. Current population of staff and inmates: 14

Prohibited P-137

Elba is a restricted area, and only authorized spacecraft are permitted to enter this system.

EMINIAR (−37.0, 222.3, 25.1)

A large yellow star in a dense stellar cluster, Eminiar has eleven planets, two of which are inhabited: Eminiar III (Vendikar) and Eminiar VII. Both have a very advanced humanoid civilization, which evolved originally on the seventh planet and later colonized Vendikar. The inhabitants of this system recently ended a five-century-long interplanetary war, and are currently negotiating a trade agreement with the Federation. Class 3 approach facilities are being installed.

EPSILON BOOTIS	see: *IZAR*
EPSILON CANARIS	see: *ADHARA*
EPSILON INDI	see: *ANDOR*
ETA SERPENTIS	see: *TUNG HAE*

ETA SERPENTIS (40.8, 61.6, 7.2)

Colony Terra Five (class 2 facilities) is located on the sixth planet in this system of eight planets orbiting a moderate size yellow star. Established in 2170, the colony now supports a thriving population of 850,000 and has several large cities and universities, as well as a Star Fleet support base.

EXCALBIA (−54.8, −157.7, −193.4)

The first of three planets orbiting a blue-white giant (class 0 facilities), Excalbia is Class D with a surface of molten lava. The inhabitants of Excalbia are intelligent carbon-cycle beings with a chemistry based on calcium carbonate. Contact with these entities is limited to authorized contact teams.

EXO (52.2, 74.1, 70.6)

This system consists of four planets orbiting a small red star which has begun to contract due to helium burning within the last 30,000 years. The third planet, at one time Class M and inhabited by a vaguely humanoid race, is now uninhabitable, with a mean surface temperature of −50°C; extensive ruins beneath the glaciated surface suggest an advanced civilization that never developed space flight.

FABRINA (−126.1, −144.7, −7.8)

Formerly a moderate size yellow star with eight planets, including one inhabited Class M world. It became a nova 10,000 years ago, and is now the site of a neutron star and an expanding nebula. The only known survivors are the inhabitants of Yonada, a multi-generational asteroid starship.

40 ERIDANI (19.5, 60.0, −0.6)

A triple star system composed of a large orange star and two dwarf companions, the 40 Eridani system has two planets, both circling the orange primary. The first planet is Vulcan, a large, Class M world with a high surface gravity and temperature, the home world of an advanced and highly intelligent civilization that predates mankind by several millenia. The Vulcanoid species is the second most common humanoid type in the Federation. The Vulcan Science Academy and several large port cities are located on this planet, and almost a fifth of the system's population of 14.9 billion lives in the system's heavily industrialized asteroid belt. The other planet of 40 Eridani A is an airless Class J planet with a population under 50,000. (class 4 facilities)

GAMMA HYDRA (36.9, 87.9, – 18.6)
A giant yellow star orbited by six planets (class 0 facilities). The fourth planet is Class M, and at one time was the site of a Federation outpost colony.

Danger D-361

Gamma Hydra IV recently passed through the radioactive tail of a comet, and the resulting surface radiation may cause hyper-aging in unprotected humanoids. This planet should be avoided until the surface radiation decays to safe levels.

GAMMA 7 (134.5, 176.7, 11.7)
At one time this binary system supported a population of seven billion on four of the seven planets orbiting Gamma 7A, a fourth magnitude yellow star and the primary star of the pair. The secondary star, a moderate blue star, has no planets. All life in the system was destroyed by a space amoeba.

GAMMA TRIANGULI (– 170.5, – 126.0, 91.6)
A yellow giant with eleven planets (class 0 facilities), Gamma Trianguli has a primitive humanoid population (*Homo Trianguli*) of less than one thousand individuals on its sixth planet.

Prohibited P-311

This system is protected under the Prime Directive of Non-Interference, and only authorized contact with its natives is permitted.

GAMMA VERTIS (26.8, 200.4, 7.8)
Gamma Vertis is a moderate size orange star (class 1 facilities) with six planets, five of which (planets II through VI) are actually satellites of a massive Class A gas giant. Gamma Vertis IV is a low-gravity world, and supports an advanced but non-technological humanoid population which communicates telepathically. Pop: 1.6 billion.

GIDEON [Delta Dorado] (54.5, 42.7, –242.9)
Gideon is the seventh planet of eight orbiting a bright white star (class 1 facilities), and has repeatedly refused to establish diplomatic relations with the Federation. At one time almost completely germ-free, Gideon suffered from extreme overpopulation (estimated in 2263 at over 500 billion, surpassing the total population of the Federation), but the recent introduction of Vegan choriomeningitis wiped out almost 97% of the planet's population.

GOTHOS (last known position: – 132.6, – 125.7, – 114.3)
A Class H planetoid of magnitude 1-E (class 0 facilities), Gothos is a rogue traveling without a primary through an otherwise empty sector of space. It has a poisonous atmosphere, but areas have been terraformed by intelligent non-corporeal life-forms.

Prohibited P-140

A dangerous life form may be present on the surface. It is extremely hazardous and contact with this planetoid must be avoided.

HALKA (– 29.2, – 137.3, – 6.7)
The second of three planets orbiting a giant red star (class 0 facilities), Halka has a peaceful humanoid population with little interest in a Federation alliance. Large deposits of crude dilithium are known to exist on Halka. Pop: 580 million

HANSON'S PLANET (188.8, 34.9, 12.6)
A Class M planet, the first of three circling UFC 2848832, a white dwarf (class 0 facilities). Although inhabited by a race of large, furry anthropoids (*homo hansonii*), the planet has a mean temperature of 0°C, and is not suitable for humanoid life.

INGRAHAM (52.0, 39.9, 27.9)
A moderate white star with two planets in a trojan orbit (class 0 facilities). Ingraham B, the smaller of the two, is Class M, and was once the site of an advanced spacefaring civilization that was destroyed by the flying parasites in 2259. Although only vaguely anthropoid, the Ingrahamites had a limited trade agreement with the Federation.

IZAR [Epsilon Bootis] (36.7, 84.7, 17.6)
The third planet of five orbiting a small orange star in a binary system, Izar is a heavily populated world with class 3 facilities. The other star in the system is a small blue one. An early Earth (Sol III) colony, Izar is now an independent world within an industrial sector of the Federation. A Star Fleet training base and several large cities are located on the major continent of Pangaea. Pop: 11.5 billion

JANUS (– 123.8, – 30.1, – 15.8)
A moderate orange star orbited by ten planets (class 1 facilities). None of the planets are Class M, but the sixth planet is Class H, with rich veins of pergium and other super-heavy elements. A mining colony is located in an extensive network of subsurface tunnels on Janus VI, and supplies the reactors of several dozen neighboring worlds. The only known intelligent silicon-based life-form, the horta, is native to Janus VI, and currently controls a one-half interest in the mining colony. Humanoid population: 157

KAFERIA [Tau Ceti] (22.8, 58.7, – 1.5)
The third planet of five orbiting the moderate size yellow star Tau Ceti (class 1 facilities). Kaferia was one of the first non-human civilizations contacted. A race of intelligent insectoids, the Kaferians have had profitable trade relations with the Federation for almost two hundred years. Their chief exports are flora and fauna genetically tailored by Kaferian biologists. Pop: 7.2 billion

KALANDAN OUTPOST (12.8, 231.2, – 34.0)
The only planet of a moderate yellow star (class 0 facilities) on the fringe of Federation space, this world is either an artificial construct of the ancient Kalandans or an extremely dense asteroid tailored for their purposes. Although only slightly larger than Earth's moon, it is class M, with a barren but viable surface ecology. The planet was apparently abandoned several million years ago when disease killed the outpost personnel.

L-370 (−217.9, 7.2, −141.4)

Originally, seven planets orbiting a moderate orange star. All the planets in the system were destroyed by an intergalactic berserker.

L-374 −215.7, 7.5, −139.5)

A red giant originally orbited by eight planets. The first three planets were destroyed by the berserker.

LAMBDA PERSEI see: *TYPERIAS*

LAVINIUS (140.7, 11.1, −10.4)

A bright blue star with ten planets (class 0 facilities). At one time, the fifth planet was inhabited by an intelligent spacefaring civilization that predates the Vegan Tyranny. Little is known of this civilization, as the inhabitants seem to have destroyed most of their own artifacts after the invasion of flying parasites two hundred years ago.

M 24—ALPHA (−85.5, −59.1, −75.8)

Triskelion is the second planet of a moderate size yellow star in this trinary system composed of two yellow stars and a white dwarf orbiting a common center of gravity (class 0 facilities). Once the home of an intelligent technological civilization, the Triskelions now exist only as disembodied intellects in subsurface vaults. The planet has a small and very disparate humanoid colony, which was recently given self-government through Federation intervention. Pop: 480

M 43—ALPHA (72.8, −29.1, −68.7)

A trinary system, with ten planets orbiting the moderate yellow primary (class 0 facilities). The fourth planet, Ekos, and the fifth planet, Zeon, are Class M with large humanoid populations. Although Ekosians and Zeons are branches of the same humanoid race, both planets claim to be the species' home world. The late John Gill was Federation cultural advisor to this system. Total pop: 16.1 billion

Prohibited P-394

This system is protected under the Prime Directive of Non-Interference, and any unauthorized contact with its natives is expressly forbidden.

M 133 see: *UFC 113*

MAKUS (—8.6, 124.6, 32.5)

The third planet of eight orbiting a moderate size yellow star (class 2 facilities), Makus is a frontier world, colonized within the last century. In addition to a small Star Fleet supply base, the planet supports a thriving agricultural colony (pop: 71,000) which exports native foodstuffs and pharmaceuticals.

MALURIA [Omega Cygni] (58.2, 9.1, 14.6)

A system of ten planets orbiting a red-orange giant, and at one time the home system of an advanced and peaceful humanoid race with remarkable prescient abilities (pop: 4.0 billion). A small Federation contact team was situated on planet IV until all four inhabited worlds in the system (planets II through V) were sterilized by the Nomad probe in 2262. Current plans are to re-introduce basic flora and fauna to these worlds for eventual re-colonization.

MANARK (−53.1, −45.1, −12.0)

A red giant orbited by four planets (class 0 facilities), Manark supports no populated worlds, although the fourth planet is Class G and is marginally habitable. The sandbat, native to this planet, is a dangerous avian life-form that can kill almost instantaneously, by injecting carbonic acid into the bloodstream.

MARCOS (26.9, 82.8, −2.2)

The twelfth planet of twelve orbiting a moderate-size orange star (class 2 facilities), Marcos supports a mixed humanoid population, of humans, Vulcans, and Vegans, that has developed a viable form of anarchistic government. Although a Federation member, the colony of about six million is largely self-sufficient, and has resisted entry into the interstellar market.

MARCUS (42.6, −20.4, 10.6)

In a system of four planets orbiting a moderate size red-orange star (class 1 facilities), Marcus is the second world and is the home of a small humanoid society of about 2.4 million. At one time a large industrial civilization rating F on the Richter Scale, the Marcusites never developed space flight, and instead fought a number of devastating nuclear wars. A dwindling population now rates less than E−, and is noteworthy only for its artistic accomplishments, such as those of the reknowned artist Sten, who lived during the last century.

MEDUSA (27.2, 137.6, −41.3)

A binary system composed of a bright white star and a yellow dwarf companion (class 2 facilities), Medusa supports a system of eight planets, the fourth of which is inhabited. Although Medusa IV has been surveyed only by unmanned probes, it is typical for a Class C world, the surface blanketed in dense layers of carbon dioxide. The Medusans, intelligent non-corporeal life-forms, have followed a unique evolutionary path and seem to be largely electromagnetic in nature. Contact between the Medusans and the Federation has been brief (the planet was discovered c. 2257), but they have already demonstrated an extremely advanced scientific culture, and telepathic powers unlike any others in the known galaxy.

MELKOT (−76.9, −145.9, −12.7)

Melkot is the second of six planets orbiting the home of an intelligent non-humanoid race. Although surveyed only briefly, planet II is apparently Class M, with no surface features visible from orbit. The Melkotians have agreed to a limited cultural exchange with the Federation, and additional data is withheld pending the report of the contact team.

Prohibited P-2ll

The Melkotians have established a spherical network of buoys surrounding their home system, and until recently would not allow any spacecraft to enter this region. Until formal trade agreements are completed, the boundaries of Melkotian space are to be respected.

MEMORY ALPHA (116.9, 115.5, 0.0)

Memory Alpha was established in 2229 for the Federation Centennial celebration as a central library-computer complex, providing access for all races to the total knowledge of the Federation. Located on a small Class J planetoid (class 2 facilities) moved into a precise location on the Federation plane, the Memory Alpha complex was opened to the general public in 2231. Partially destroyed by the Zetars in 2263, large sections of the library-computer are now being overhauled. Resident pop: 600

MENKALINA [Beta Aurigae] (−1.4, 61.4, 9.1)

A variable binary system consisting of two moderate yellow-white stars (class 0 facilities), this system is of interest to Federation scientists studying gravity waves, and a small unmanned monitoring station has been established on the only planet of the system's primary.

MERAK (11.2, 72.7, 17.1)

The second planet of four orbiting a moderate white star (class 2 facilities), Merak is an agricultural world colonized c. 2218. Pop: 3,900

MIDOS (42.2, 47.4, 96.9)

A moderate yellow star with seven planets (class 1 facilities), Midos supports a small human colony on its fifth planet, an Earthlike world, rich in natural resources but with no native animal life. Pop: 481,000

MINARA (−193.0, −87.1, −11.3)

Until recently, a yellow giant star orbited by seven planets, the first three of which were class M. Intelligent civilizations are believed to have existed on these three worlds, and a Federation outpost was briefly established on planet I. Minara went nova in 2263, destroying all but two planets.

Danger D-445

Novae emit intense radiation that can be lethal to humanoid life. Spacecraft should avoid passing within ten parsecs of this star.

MIRA [Omicron Ceti] (7.9, 36.1, −8.9)

A binary system composed of a variable red supergiant and a blue subdwarf (class 0 facilities), Omicron Ceti supports a system of five planets, all orbiting the primary. The third planet is Class M, and was the site of a human agricultural colony of several hundred established in 2260 and relocated the following year.

Danger D-389

The variable primary was found to emit Berthold radiation, which quickly disintegrates animal tissue and renders the surface uninhabitable for long periods. Certain sporial life-forms not native to the system actually thrive on the radiation, and their therapeutic effects have prompted a proposal to establish a health resort on Omicron Ceti III.

MU LEONIS — see: *ARDANA*

MUDD (−13.3, 225.1, −45.5)

Named after its only human inhabitant, Mudd is a Class K planet and is the second of five orbiting UFC 257704, a moderate red star (class 1 facilities). It is presently inhabited by more than 200,000 androids left there by an extragalactic civilization over a million years ago, and extensive subsurface tunnels have been adapted for humanoid habitation.

MURASAKI 312 (−66.5, 47.4, 8.1)

The Murasaki objects, first observed in the early 21st century, are quasarlike phenomena that are thought to be rarified gas clouds illuminated by synchrotron radiation. The phenomena may encompass several star systems, and peak at unpredictable intervals (the most intense radiation is at a wavelength of 485 nm).

Warning W-176

Murasaki phenomena have been known to interfere with the electronic sensor and guidance equipment of nearby spacecraft, with the peak effect lasting as long as twenty-four hours.

NEURAL [Zeta Bootis] (57.8, 114.1, 33.1)

This Class M world is the third of ten orbiting a bright yellow star in a binary system (class 0 facilities). The planet, discovered c. 2248, is very Earthlike, and supports a native population rating D− on the Richter Scale. Pop: 13 million.

Prohibited P-388

This system is protected under the Prime Directive of Non-Interference, and any unauthorized contact with its natives is expressly forbidden.

NEW PARIS (−26.3, 200.6, −147.6)

The sixth planet of fifteen orbiting a blue-white giant (class 1 facilities), New Paris is a Federation outpost world colonized c. 2105 by the starliner *Lafayette*. The twin port cities of Cleante and Candide have populations in excess of one million, and export both manufactured goods and farm produce. Pop: 26 million.

OMEGA (−88.4, 224.4, 2.0)

A moderate orange star with eight planets (class 0 facilities), including two inhabited worlds. Omega IV is an Earthlike world populated by humanoids whose development has been remarkably similar to that on Terra; it is widely believed that this planet is a "lost" human colony that has reverted to barbarism, and now rates about B− on the Richter Scale (pop:130,000). Holberg 917G, the seventh planet in the Omega system, is a largely barren Class G world which once supported a neanderthaloid population similar to the Kalar of Rigel VII. It is now owned by a Mr. Brack.

OMEGA CYGNI — see: *MALURIA*
OMEGA FORNACIS — see: *TIBURON*

OMICRON (87.8, 218.8, 131.3)

A moderate red-orange star orbited by eight planets (class 0 facilities), the fourth of which is Class M. Once the site of an advanced humanoid civilization, the surface of Omicron IV was rendered uninhabitable by a nuclear war c. 1930 (Old Calendar).

OMICRON CETI — see: *MIRA*

OMICRON DELTA (−109.4, −6.7, −46.4)

A group of six star systems in an enveloping nebula (class 0 facilities), the Omicron Delta region is believed to be the result of a supernova explosion several centuries ago. The only explored class M world in the region is the fourth planet of ten orbiting a moderate yellow star, a world that was converted into an entertainment complex by an advanced humanoid culture believed to have originated in one of the other star systems in the region. The amusement park planet is entirely automated, and visitors are welcome.

ORGANIA (−112.6, 186.3, −12.1)

Organia, the fourth planet of six orbiting a bright yellow dwarf (class 1 facilities), is the only Class M world in a strategic volume of space between the Federation and

Klingon Empire, and was coveted by both sides as a naval base until the signing of the Organian Peace Treaty in 2261. The inhabitants, apparently a simple humanoid culture rating D− on the Richter Scale, are actually a race of immensely advanced radiant beings that have very little interest in the affairs of corporeal beings beyond the enforcement of a galactic peace. Pop: 14,000?

PLATONIUS (−116.8, −73.6, 65.6)

This Class M planet is the fourth of four orbiting a bright orange star, and the only humanoid inhabitants are refugees from Sandara, a star that went nova several millenia ago. The Platonians have utilized the natural abundance of kironide to develop their psychokinetic abilities, and have shown little judgment or compassion in the use of these powers. Pop: 71

POLLUX [Beta Geminorum] (13.9, 65.6, 0.6)

This giant yellow-orange star is orbited by seven planets (class 0 facilities), the fourth and fifth of which are Class M. Both are habitable, but are currently devoid of intelligent life. Planet IV, a parklike world, was the home of a now-extinct humanoid race that visited Earth (Sol III) in antiquity.

Psi 2000 (51.9, −15.1, −34.3)

An unstable yellow subdwarf nearing the end of its main sequence evolution (class 0 facilities), Psi 2000 once supported an extensive planetary system that has since escaped the star's gravitational pull or has been disintegrated into asteroid belts.

Danger D-421

The orbit of Psi 2000's last satellite, La Pig, is now an asteroid belt, and planetary debris is traveling throughout the system on uncharted trajectories. Spacecraft should exercise due caution.

PYRIS (−1.6, −93.4, −2.6)

A blue dwarf orbited by ten planets (class 0 facilities), the seventh of which is marginally Class M. At one time, Pyris was the base of an extra-galactic civilization attempting to gain a foothold in this galaxy.

PLANET Q (4.7, −192.7, −216.8)

A small Class J planetoid, orbiting a moderate yellow star (class 1 facilities), that was terraformed and settled in the early 23rd century as a colony of scientists deliberately remote from the Federation hub. Now a self-supporting colony of almost 450,000, the surface of Planet Q is habitable, if somewhat barren; most of the population still resides within the domed city of New Princeton.

REGULUS [Alpha Leonis] (10.7, 83.9, 0.7)

The Regulus system consists of thirteen planets orbiting a blue-white giant in a triple system (class 1 facilities). The other two stars are orange dwarfs orbiting well outside the region of the planets. Several of the planets are Class M, but only one, the second planet, has developed intelligent life. The Regulans, a non-humanoid race rating G+ on the Richter Scale, have opened the plateaus on their southern continent for human habitation, and a small Federation colony (pop: 16,000) now occupies this region. Regulus V also supports advanced non-humanoid life, including the giant Regulan eel-bird and the Regulan blood worm. Pop: 8.3 billion

RIGEL [Beta Orionis] (−209.9, 7.7, −136.0)

This quadruple star system includes two stars of interest, a blue-white super-giant and a somewhat smaller blue-white giant, and supports a total of thirteen planets, six of which are inhabited (class 3 facilities). This remarkable number of Class M worlds is attributed to the star's extensive habitable zone, and to the Hakel radiation belt which surrounds the system's primary and shields against the lethal radiation emitted by the B spectral class super giant. Rigel II and Rigel IV, sometimes called the Rigel Colonies, were settled by humans within the last two centuries, and are now major Federation worlds with a combined population in excess of 8 billion. Rigel V is inhabited by a peaceful humanoid culture (pop: 1.2 billion) that is thought to be an offshoot of the Vulcan race, and has been a Federation member since the 2180s. Rigel VI and VII are a double planet system in a trojan orbit. Rigel VII, a large Class M world, is inhabited by a belligerent neanderthaloid race called the Kalar, rating about D+ on the Richter Scale (pop: 10,000). Rigel VIII, also known as Orion, is one of the very few inhabited ringed worlds, and supports a native humanoid population of aggressive, yellow-skinned warriors (pop: 5.4 billion). Given interstellar travel by Earth explorers before the implementation of the Prime Directive, the Orions colonized the two planets of Rigel's blue giant secondary star, and then went on to form a pirate empire trading primarily in Orion females, semi-intelligent and green-skinned, but prized for their aggressiveness. This slave trade was ended in the 2250s by Federation intervention, and more recently, the decision to let the Orion worlds remain neutral has been questioned. Rigel XII is a class G desert planet with large deposits of crude dilithium, and supports a small mining colony (pop: 6).

ROMII (−180.0, −156.4, −1.8)

A home star in the Romulan Star Empire, evidently an early colony of Romulus Prime. A white subdwarf with four planets; only one, the first planet, is inhabited. Est. pop: 5 billion

ROMULUS (−176.3, −158.5, −1.8)

The Federation name for the home star of the Romulan Star Empire, a small white dwarf in a binary system. The star is believed to have only two planets, Romulus and Remus, orbiting each other in a trojan relationship. Both planets appear to be class M and show signs of extensive habitation: the total population is estimated at over 20 billion.

SANDARA (−45.9, 147.7, 70.2)

A star with several planets, at least one of which was inhabited. It was destroyed in ancient times by a nova. The only known survivors are the inhabitants of the planet Platonius.

SARPEIDON see: *BETA NIOBE*

SCALOS (−70.1, −121.1, −183.2)

This class M planet is the fourth of eight orbiting a moderate yellow star. The native humanoid population, although technologically very advanced, was exposed to radioactive pollutants which accelerated their rate of metabolism and rendered all male Scalosians sterile. The planet is now uninhabited.

SHERMAN'S PLANET (−171.3, 119.2, −4.3)

Named after a friend of the discoverer, this Class M world is the fifth of ten orbiting a moderate yellow star (UFC 24187) with class 1 facilities. It is presently being developed by both the Federation and the Klingon Empire as an agricultural colony. The Federation colony on the southern continent has had some success with the grain quadrotriticale as a staple crop. Total pop: 42,000

SIGMA DRACONIS (23.4, 60.4, 5.4)

A moderate yellow G-9 star orbited by nine planets, three of which (planets III, IV and VI) are Class M and inhabited by intelligent life. The third planet is pre-industrial, with a population of 2.1 billion and a rating of B on the Richter Scale. The fourth planet has a Richter rating of G, and has developed rudimentary interplanetary flight (pop: 6 billion). Planet VI is entirely glaciated, but supported an advanced technological civilization before the current ice age. Artifacts of this culture are still evident in underground caverns (pop: 179,000).

SIGMA IOTIA (−5.7, −144.2, −109.1)

First contacted c. 2167 by the U. S. S. *Horizon*, Iotia is the second planet of nine orbiting a large yellow star (class 0 facilities). An intelligent society on the verge of industrialization was contaminated by the *Horizon*, and is now a Federation Protectorate with a cultural rating of E+ on the Richter Scale.

61 CYGNI see: *TELLAR*

SOL (23.9, 61.8, 0.0)

A moderate size yellow star orbited by ten planets (class 4 facilities). The third planet, Terra or Earth, is extensively populated, and is the home world of the human species. One of the founding worlds of the UFP, Terra is a major cultural and scientific center, and one of the most technologically advanced planets in the Federation. Star Fleet, a successor to the Terran UESPA, is based in the port city of San Francisco. Terra's only natural satellite, Luna, is also extensively populated, and the underground city of Lunaport is the fifth largest in the Federation. Sol IV, or Mars, is a class K planet in the process of being terraformed for surface habitation, and a number of colonies with a total population of 580 million have been independent from Terran authority since the early 21st century. Extensive mining colonies are also located on Mercury (Sol I), Ceres, and Ganymede. Total system population: 31 billion

STAR CLUSTER NGC 321 see: *EMINIAR*
STAR SYSTEM 611 see: *UFC 611 Beta*

TALOS (−119.4, −43.7, −24.0)

A binary system in a globular cluster (class 0 facilities), Talos is a red giant orbited by eleven planets. The fourth planet is Class M, and was once the site of an advanced spacefaring culture.

Prohibited P-007

No vessel, under any condition, emergency or otherwise, is to visit Talos IV. To do so is punishable by death.

TANTALUS (−89.7, −11.7, −3.3)

A white dwarf orbited by six planets, of which the fifth planet is marginally Class M. Tantalus V is the site of the Tantalus Penal Colony, a rehabilitation facility for the criminally insane (class 1 facilities). Population of staff and inmates: 147

Prohibited P-179

Tantalus is a restricted area. Only authorized spacecraft are permitted in this system.

TARSUS (−76.5, 138.5, −27.0)

A moderate size red-orange star with five planets (class 1 facilities), one of which, Tarsus IV, is Class M. A Federation colony of 8,050 was established on this planet about 2213, and was the site of a mass execution when Kodos, the Deputy Commander, ordered the deaths of half the population to conserve a dwindling food supply. Pop: 4330

TAU CETI see: *KAFERIA*
TAURUS see: *EL NATH*

TELLAR [61 Cygni] (25.0, 60.1, 2.6)

Tellar is the fifth world of eight orbiting 61 Cygni A, an orange dwarf in a binary system (class 3 facilities). The home of an intelligent porcine species, Tellar is one of the founding worlds of the Federation and was one of the first inhabited planets discovered by Earth (Sol III) explorers. Tellarites, although belligerent by nature, have an advanced technology and are superb engineers. Pop: 11.8 billion

TELLUN (−209.9, −38.9, −9.6)

A binary system composed of a yellow giant and a blue dwarf (class 2 facilities). Tellun supports seven planets, including two Class M worlds. The first planet, Troyius, and the second planet, Elas, have evolved independent humanoid cultures, and have been in a state of mutual warfare since interplanetary travel was discovered on Troyius. A truce was recently reached with the marriage of the Dohlman of Elas to the Troyian Prefect.

THASUS (45.8, 59.0, −12.6)

The third planet circling a small red dwarf (class 0 facilities), Thasus is a barren Class L world unsuitable for human life. Once thought to be uninhabited, recent findings show that a race of non-corporeal beings have evolved on this planet from conventional humanoid ancestors.

THETA (−151.3, −86.4, −3.7)

A blue giant in a binary system, Theta has eleven planets, the seventh of which is Class M (class 1 facilities). The Theta VII colony, established about 2147, is located underground to shield it against the seasonal flares of the system's primary. The chief industries include mining and subterranean farming. Pop: 14,500

THETA CYGNI (61.8, 27.7, 23.2)

A moderate size white star with thirteen planets (class 0 facilities), Theta Cygni once supported an advanced spacefaring civilization on its twelfth planet. This civilization was destroyed by the flying parasites several decades before the planet's discovery in the 2180's, and few relics remain of the planet's native culture.

TIBURON [Omega Fornacis] (−121.9, −207.4, 236.4)

The third planet of seven orbiting Omega Fornacis A, a dim red dwarf in a binary system (class 3 facilities), Tiburon is the home world of an advanced humanoid race that is one of the most distant members of the Federation. Although the natives exhibit several physiological differences from the pan-humanoid norm, they are essentially human. It has even been suggested that they are a mutated form of *homo sapiens*, as Tiburon was also the name of a 20th century suburb of the Terran city of San Francisco. Pop: 891 million

TIME PLANET (−10.4, −51.8, −212.9)

The only planet of a dying red dwarf star (class 0 facilities), the Time Planet was the home millions of years ago of a race of immensely advanced beings, the so-called Guardians of Forever. This civilization is now extinct, but one of their artifacts, a sentient time portal, is still operational.

Prohibited P-119

No vessel, under any condition, emergency or otherwise, is to visit the Time Planet.

TRIACUS see: *ANDOR*
TRISKELION see: *M 24—ALPHA*

TYCHO (61.8, 216.1, –13.4)

A white dwarf in a gobular cluster (class 0 facilities), Tycho supports four planets, including one marginally Class M world (planet IV). The atmosphere of this planet was recently ripped away by an anti-matter explosion.

TYPERIAS [Lambda Persei] (–286.2, –62.1, 171.6)

This is the second of three planets orbiting UFC 6554309, a moderate size red-orange star (class 0 facilities). The planet is not Class M. However, some of the native minerals have useful medical properties.

UFC 113 (–23.6, –81.9, 0.7)

A system of seven planets orbiting a yellow dwarf star (class 0 facilities), one of which (planet IV) is Class M. At one time, M 113 supported an advanced non-humanoid civilization that died out when the planet's supply of natural sodium chloride was exhausted (salt was an essential additive to the natives' biochemistry). A survey led by archaeologist Robert Crater discovered one surviving member of this ancient civilization, indicating extreme longevity, perhaps in a state of hibernation or suspended animation.

UFC 611 (90.1, 71.9 –2.4)

A bright yellow star in a binary system (class 0 facilities), UFC 611—Beta has a system of five planets, the third of which is Class M. Although once an advanced civilization, the inhabitants of Beta III are an arrested culture, controlled until recently by a powerful computer. Pop: 375,000

UFC 892 (–132.1, –101.1, –56.7)

A yellow dwarf (class 0 facilities), UFC 892 has a system of eleven planets that closely parallels Sol's planetary system, although an additional planet exists in a close orbit around the system's primary. Planet 892-IV is inhabited by a humanoid race rating E+ on the Richter Scale, roughly approximating Terran culture in the mid-20th century. Pop: 4.3 billion.

Prohibited P-892

This system is protected under the Prime Directive of Non-Interference, and any unauthorized contact with its natives is expressly forbidden.

UFC 347601 (–43.3, –103.5, –82.3)

A yellow dwarf orbited by ten planets (class 0 facilities), UFC 347601 is identical to the Sol system in all measurable parameters. The third planet, called Miri's World (an obscure derivation), is a Class M world exactly the same size and mass as Terra, and the configuration of the continents is identical. A race of adolescent humans, the Onlies, occupies the planet under the guidance of a Federation sociological team. Pop: 13 million

URSULA [beta Vela] (–68.4, 215.3, –335.6)

The outermost planet of four orbiting b Vela, a white giant (class 0 facilities), Ursula is a Class N world with only one habitable land mass. Although native life is primitive, several species of Ursulian flora have medicinal uses.

VEGA [Alpha Lyrae] (28.2, 61.3, 6.9)

A large white star with ten planets (class 1 facilities), the ninth of which is Class M and is inhabited by both an advanced humanoid race and a small human settlement. Neither group is native, although the humanoids (a colony of the planet Delta III) predate the Federation settlement by almost a century. The race native to Vega IX is now believed to be extinct, but once controlled a large volume of space as what is now called the Vegan Tyranny. The nature of the native Vegans is unknown, and it has been speculated that they were inorganic, or even cybernetic, in composition. Pop: 280 million

VENDIKAR see: *EMINIAR*
VULCAN see: *40 ERIDANI*

WRIGLEY'S PLEASURE PLANET (–20.0, –48.1, 0.8)

Founded in 2238 by an interplanetary entertainment cartel, Wrigley's Pleasure Planet is a rogue planetoid about 600 km in diameter. Large areas of the planet's interior have been converted into entertainment complexes, including theme parks simulating the environments of major planets in the Federation (class 3 facilities).

YONADA (?,?,?,)

A hollow asteroid about 100 km in diameter, Yonada was adapted by the ancient Fabrini for use as a multigenerational, slower-than-light starship to carry a small percentage of the system's population to a new home. Yonada is now in orbit around new Fabrina, the third planet of UFC 376082 (class 1 facilities).

ZETA BOOTIS see: *NEURAL*

ZETAR (–92.6, –116.2, –23.8)

The second planet of three orbiting a small red dwarf, all life on Zetar was destroyed when the star expanded into a red giant several millenia ago.

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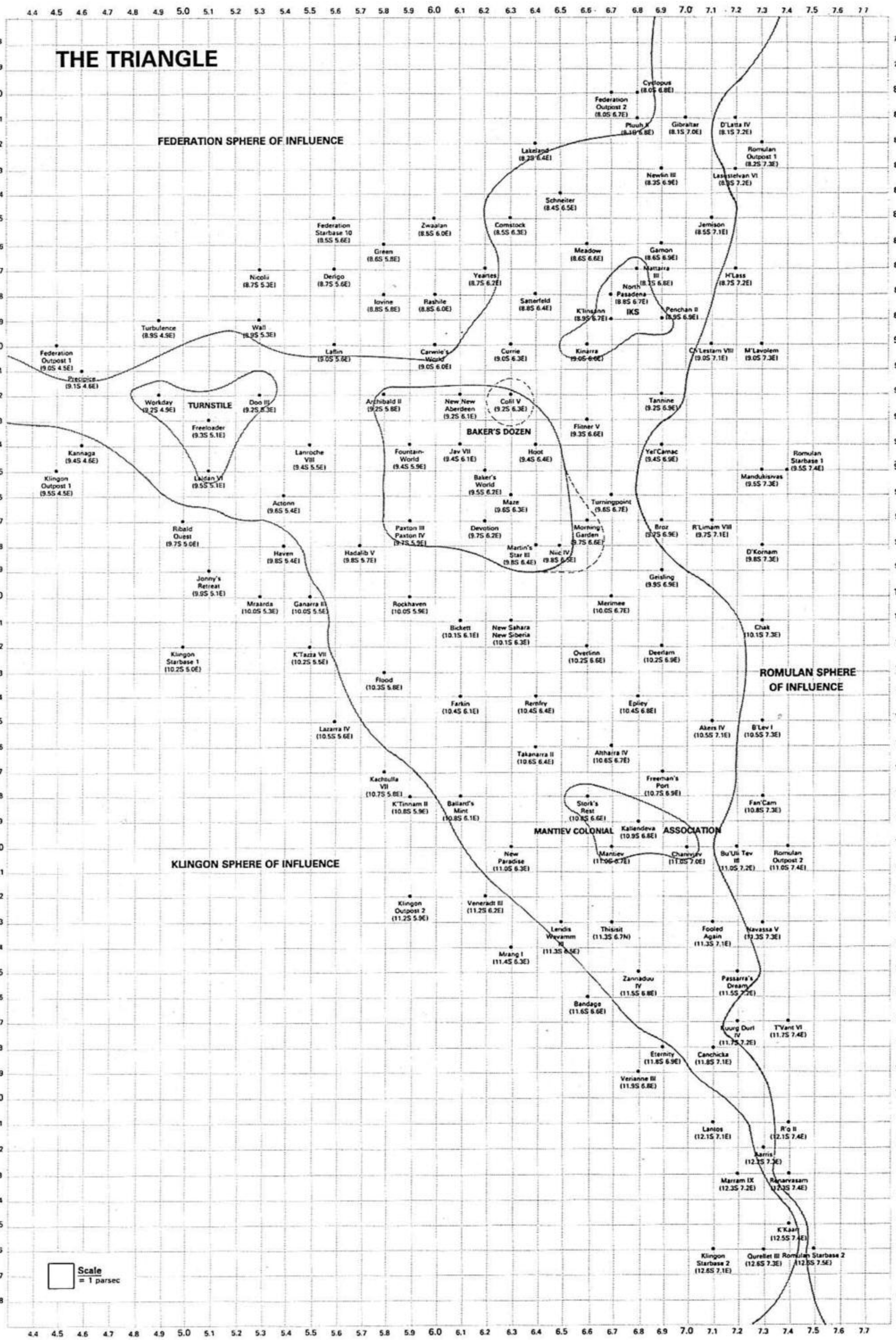


THE TRIANGLE

Introduction To The Triangle Atlas

The Triangle is vast. It measures 48 parsecs north to south, and about 30 parsecs east to west at its widest point. It contains 487 star systems as cataloged in the *Compendium Of Stellar Bodies,* the standard reference work on the subject. These systems contain 2,991 worlds, many of which have never been named or officially described.

The following pages contain the statistical, historical, political, and economic data on 120 of the Triangle's major worlds. Each of the Triangle worlds that has a major population is included here, as well as a few worlds that are important for economic, political, or military reasons.

WORLD LOGS

For each of the worlds listed in this Atlas, the standard geographical data as well as the technological, sociopolitical, and trade profiles for the civilization found there are given in a table. The coordinates of the world are given in standard NS-EW format. Following the tablular information, expository paragraphs are included that describe noteworthy facts about the world, its people, its history, or some other information concerning its status.

GAZETEERS

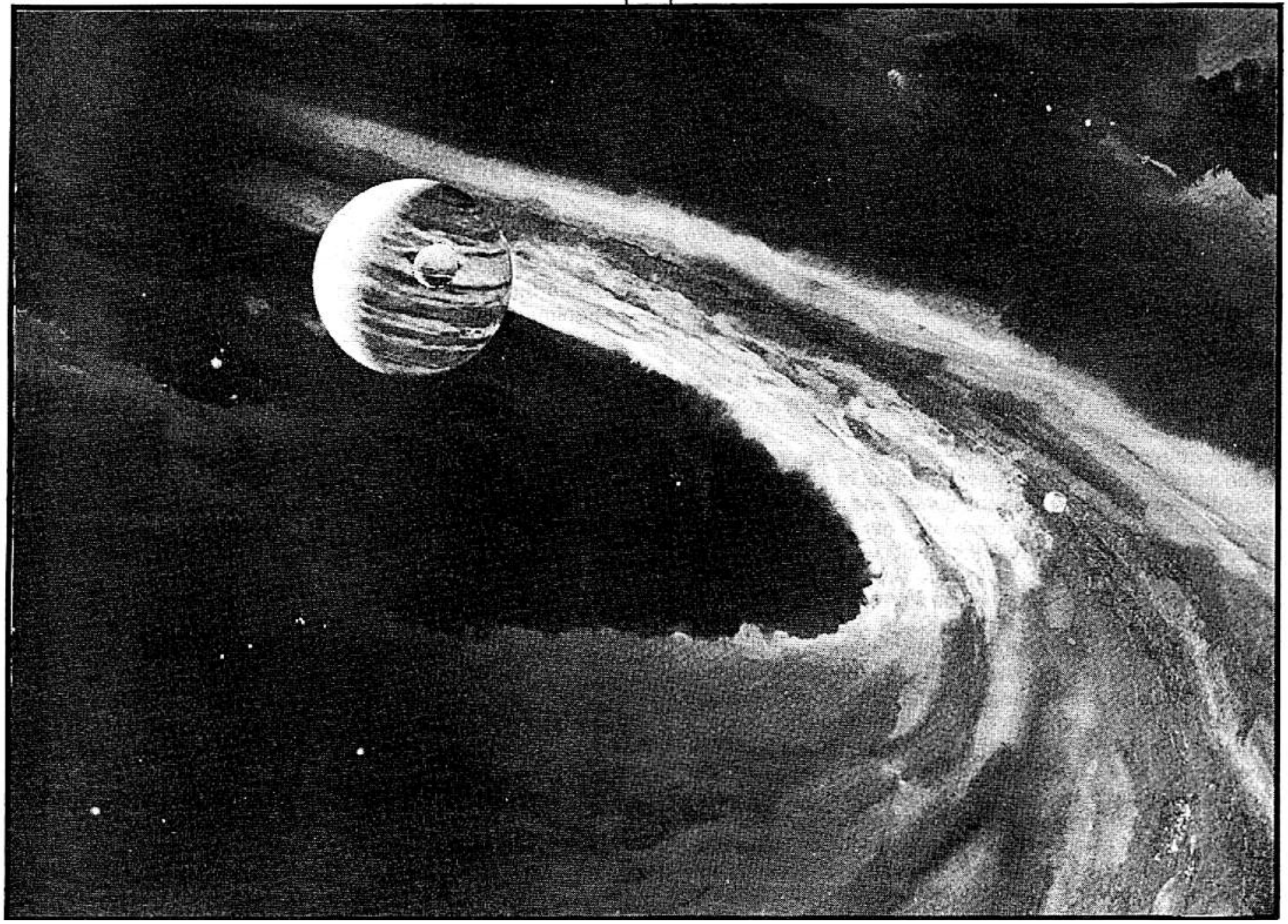
The gazeteers provided at the end of this book index these worlds in various ways. There is an alphabetical index, a political index, and indices giving major exports and imports.

UNDEVELOPED WORLDS

Merely because only 120 worlds are described in detail here, this does not imply that there are *only* 120 worlds of consequence in the Triangle. Far from it!

Most Triangle worlds remain virtually uninhabited and many are unexplored. These planets either have no obvious resources that can be exploited with ease, or have planetside conditions so inhospitable that a significant population base has not yet developed. Life in the Triangle has characteristically had a harder time gaining a foothold than is average for the major empires, and the sparseness of population centers is characteristic.

Many feel that the Triangle remains on the frontier, as close to unexplored space as the farthest flung outpost to spinward or coreward. That the Triangle has been completely mapped, that it is hemmed in on all sides by civilization, and that population centers have sprung up in a regular spacing across its length and breadth makes no difference, they claim. To these proponents of the Golden Triangle, as it is often called, a man need not venture to the farthest reaches of the galaxy to find total freedom; they contend that the Triangle offers similar opportunities for the bold, enterprising, intelligent, and lucky.



World Log: CARWILE'S WORLD

System Data	
System Name:	Douruine
Map Coordinates	(9.0S 6.0E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	1
Gravity:	.7 G
Size	
Diameter:	9100 km
Equatorial Circumference:	28,000 km
Total Surface Area	360,000,000 sq. km
Percent Land Mass:	23%
Total Land Area:	82,000,000 sq. km
Surface Conditions	
Length of Day:	22 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	35%
Radioactives:	1%
Gemstones:	16%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-90
Trade Profile:	DDDDDDD B (E)

Carwile's World is a beautiful little planet just inside the Federation sphere of influence. It is low-gravity, warm, and lush. It is also one of the few planets in the Federation to be owned by an individual. Howard Carwile is an eccentric multi-billionaire and chairman of the board of Rashile Gourmet Foods (*see* Rashile). He has set aside this planet as his own paradise, and built a sizable artist's colony near his mansion. The colony houses a great number of authors, poets, painters, illustrators, sculptors, composers, and performing musicians. There are art galleries, gigantic libraries, and fully-equipped recording studios. Many artists from all over the Federation maintain semi-permanent residences on Carwile's World. Standing invitations also go out to any artist gaining prominence in his or her field. The rest of the planet is maintained in pristine condition, on the theory that "it may provide some inspiration for anyone needing it."

World Log: CYCLOPUS

System Data	
System Name:	Verigus K
Map Coordinates	(8.0S 6.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	1.5 G
Size	
Diameter:	19,500 km
Equatorial Circumference:	60,000 km
Total Surface Area:	765,000,000 sq. km
Percent Land Mass	71%
Total Land Area:	540,000,000 sq. km
Surface Conditions	
Length of Day	32 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	38%
Radioactives:	Trace
Gemstones	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-95
Trade Profile:	ACFDDEF A (B)

Cyclopus is so named both for its large size, and for the single, huge, eye-like ocean in one of its hemispheres. Most of the rest of the terrain consists of large, flat expanses, interrupted occasionally by a few rolling hills or small forests.

The major export of Cyclopus is a hybrid grain developed from a cross between a native grass and a genetically-engineered variety of Terran wheat. This hybrid combines the nutrition of the Terran grain with the hardiness and size of the native grass. The result is a large-kerneled grain that is very high in protein and carbohydrates. Imports to Cyclopus include technological devices, radioactives, and many luxury items.

The government on this world is modelled loosely on the Terran Roman Empire. As the ruling monarch, Empress Meia d'Ricetta, is very highly-regarded by her subjects, there is very little dissension. Her government is somewhat friendly with the independents nearby, but refuses to have anything at all to do with the Romulans. Cyclopans are very supportive of the Federation.

World Log: DERIGO

System Data	
System Name:	Roedel
Map Coordinates	(8.7S 5.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,500 km
Equatorial Circumference:	52,000 km
Total Surface Area:	663,000,000 sq. km
Percent Land Mass	14%
Total Land Area:	92,800,000 sq. km
Surface Conditions	
Length of Day	24 hours
Atmospheric Density:	Thick
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	12%
Radioactives:	Trace
Gemstones	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999999-97
Trade Profile:	CEFFDFH B (C)

The population of Derigo is mostly human, with a small number of Tellarites as well. Because the surface is covered mostly by water, the Derigoans have a large underwater population cluster. The planet is considered agricultural, as its chief crops are the algaes and kelp derivatives grown in huge underwater farms. All Derigoans learn to swim when very young. At the age of five, the Derigoan child is fitted with his or her first Gill-Pack, and allowed to leave the underwater domes. Because many of the domes are in shallow water, the populace is not much threatened by dangerous water creatures.

The major exports are the crops and their processed products. The popular vegetable dish, Seagreen Five, is exported exclusively from Derigo, and is processed from one of the species of kelp native to Derigo V. There are not many metals exported, but the oceans are rich in the lighter metals, such as magnesium and aluminum. Derigoans import many of the high-technology products that make life underwater possible.

Though officially independent, the Derigoans are allied heavily with the Federation, and do much of their trading there. The Derigoan government is a representative democracy, with the President being elected once every five years. Derigo does not have a military force, but depends on the Federation to patrol its system.

World Log: GREEN

System Data	
System Name:	Kajzer
Map Coordinates	8.6S 5.8E
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	2
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area	410,000,000 sq. km
Percent Land Mass:	50%
Total Land Area:	205,000,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Terrestrial
General Climate	Tropical
Mineral Content	
Normal Metals:	39%
Radioactives	Trace
Gemstones:	2%
Industrial Crystals:	Trace
Special Minerals	Trace
Cultural Data	
Technological/Sociopolitical Index:	Federation Research Station
Trade Profile:	AAAAAAA D (X)

Green is a small, tropical planet within Federation influence. It has no real population, but is, rather, only a small biological research station. Except for its lighter gravity, conditions on Green are almost identical to those of Terra during its Jurassic and Cretaceous Periods. Native life on Green includes many species so remarkably like the Terran dinosaurs that biologists have a difficult time finding differences between Terran fossils and their Green counterparts. No theory yet offered has been able to explain these remarkable coincidences.

The research team is headed by Doctor Richard Temore. All the team's supplies are furnished by the Federation, and the world obviously produces no exports. System patrol duty is performed by Star Fleet.

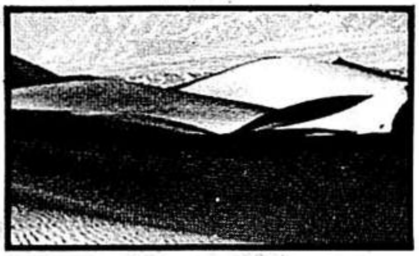
World Log: IOVINE

System Data	
System Name:	Kiefer
Map Coordinates	(8.8S 5.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	3
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area	660,000,000 sq. km
Percent Land Mass:	26%
Total Land Area:	170,000,000 sq. km
Surface Conditions	
Length of Day:	25 hours
Atmospheric Density:	Thin
General Climate	Desert
Mineral Content	
Normal Metals:	2%
Radioactives	10%
Gemstones:	8%
Industrial Crystals:	Trace
Special Minerals	Trace
Cultural Data	
Technological/Sociopolitical Index:	999991-97
Trade Profile:	GEDDDEF B (E)

Iovine is, oddly enough, a desert in the middle of one huge ocean. Aside from a few small islands, the entire land mass rises out of the sea as a two-mile-high plateau. Its walls are sheer cliffs, and fifty-mile per hour winds scour across the surface. Iovine's three moons cause violent weather patterns over the oceans, but the plateau does not receive much rain. Even if it did, there is no topsoil in which to grow anything.

Iovine is rich in radioactive ores and gemstones. Thus, there is a sizable mining colony underground on Iovine Plateau. The miners must import all supplies, and export only the ores and raw gemstones. Unless they are receiving shipments or personnel beamdowns the miners stay underground. There are above-ground transporter stations, but these seem to be in constant danger of being blown away by severe storms. Thus, visitors to the world must sometimes stay on longer than they originally intended.

The government on Iovine Plateau is Federation corporate. Iovine is owned and operated by Intersystems Extractions, Inc. The official in charge of the mines on Iovine is Mine Superintendent Rafe Matthews. Matthews is stern, but well-liked by most of the miners. There is little in-system patrol done in the Kiefer system, as the occasional Star Fleet patrol ship takes care of it.



World Log: LAFLIN

System Data	
System Name:	Caskey
Map Coordinates	(9.0S 5.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area	660,000,000 sq. km
Percent Land Mass:	64%
Total Land Area:	420,000,000 sq. km
Surface Conditions	
Length of Day:	29 hours
Atmospheric Density:	Thin
General Climate	Cool Temperate
Mineral Content	
Normal Metals:	7%
Radioactives	Trace
Gemstones:	1%
Industrial Crystals:	10%
Special Minerals	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-97
Trade Profile:	FCCFDFG B (X)

Laflin is a cool, dry, dilitihium mining colony governed by Ch'kall Latoch'n, an Andorian. Despite this planet's size, the dilithium is found in only one mountain range in the northern hemisphere. At the foot of the mountains is the only town of any size. The rest of the planet is sparsely-populated and barren.

The major export of Laflin is dilithium, with a few other metal ores being shipped out as well. There are no processing facilities on Laflin. All supplies and equipment must be imported.

Although Laflin is a Federation colony, it is not heavily-patrolled. Star Fleet command discovered that it would be far easier to protect the incoming and outgoing ships and ignore the rest of the system. There is a base complex in the system's asteroid belt that may or may not be a privateer stronghold. Although Star Fleet has investigated several times, they find only abandoned facilities. The mining town, however, is heavily patrolled by security officers. To date, there has never been a shipment of dilithium hijacked. The mining colony is governed by an Andorian, Ch'kall Latoch'n.

World Log: LAKELAND

System Data	
System Name:	Purlii
Map Coordinates	(8.2S 6.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	2
Gravity:	.9 G
Size	
Diameter:	11,500 km
Equatorial Circumference:	36,000 km
Total Surface Area:	460,000,000 sq. km
Percent Land Mass:	50%
Total Land Area:	230,000,000 sq. km
Surface Conditions	
Length of Day:	32 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	5%
Radioactives:	Trace
Gemstones:	4%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999999-97
Trade Profile:	BDDECDF/A (C)

Lakeland is the vacation spot of the Federation. It has no oceans; instead, it offers millions of lakes ranging in size from farm-pond all the way up to the great lakes. The climate is favorable for growing things, and most of the lakes are filled with almost any imaginable type of fish. Nearly every species of fish in the Federation may be found in at least one of Lakeland's lakes. There are not many large cities; most of the population is clustered in smaller lakeside villages and towns.

Certain of the larger lakes are used for harvesting many species of fish. To prevent over-harvesting and to assure future harvests, rigid rules are strictly enforced. Although some of the harvest serves as food on-planet, much of it is shipped to processors both inside and outside the Federation. Lakeland's major imports include high-tech equipment and luxury items. Most of the luxury items are then sold to the large numbers of vacationers visiting the planet.

There is thought to be a small black market supply on Lakeland, but it is not easily located. Likewise, pirates are rumored to have placed bases in the more remote sections of the planet, but this has not been substantiated.

Lakeland's governmental structure is representative, but this is due to its colonial status with the Federation. The Governor of the planet is chosen in popular elections held every four years. As a Federation Protectorate, Lakeland is patrolled and policed by the Federation.

World Log: NICOLII

System Data	
System Name:	Camon
Map Coordinates	(8.7S 5.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq. km
Percent Land Mass:	76%
Total Land Area:	500,000,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Thick
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	30
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	Federation Colony
Trade Profile:	GDGDDDD/B (X)

Nicolii is a large, rather barren world that is not much good for anything. For that reason and because it is right on the Federation border, a dilithium cracking station has been placed there. The station is manned exclusively by Star Fleet personnel, who live with their families in the town built next to the station. The town's population is currently at about a thousand. Nicolii's other inhabitants are the few independent miners prospecting on the other side of the plant. These prospectors occasionally come into town to sell what they have found, and to buy more supplies.

World Log: PLUUH II

System Data	
System Name:	Pluuh
Map Coordinates	(8.1S 6.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	0
Gravity:	1 G
Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	510,000,000 sq. km
Percent Land Mass:	49%
Total Land Area:	250,000,000 sq. km
Surface Conditions	
Length of Day:	29 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	Trace
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-97
Trade Profile:	FGGDDEG/B (D)

Pluuh II is a swamp world that was discovered by a Tellarite exploration team. Its climate is hot, damp, and very uncomfortable. Neither trees, animals, nor insects exist here, the highest life form being a simple fern. A family of fungii very important as a food source grows on Pluuh II. The fungus is found in many forms, most of which are valuable. Among these are: Air Truffles, an above-ground variety tasting almost exactly like Terran Truffles; Grey Paste, a high-protein raw material for use with food synthesizers; and Puff Dust, one of the ingredients used to manufacture Sterilite.

Pluuh II is a Federation colony, administered by Governor Guumfar Lurb. It is open for development to all UFP-chartered corporations. Thus, there are a large number of research and processing stations spread across the surface of the planet. In order to open a station on Pluuh II, an application must be filed with the Governor's office, and is usually passed within two or three weeks. The Federation patrols the system, and has a small peace-keeping force in Prepluuh, the capital city.

World Log: PRECIPICE

System Data	
System Name:	Brightstar
Map Coordinates	(9.1S 4.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VIII
Number of Satellites:	1
Gravity:	1.1 G
Size	
Diameter:	14,300 km
Equatorial Circumference:	44,000 km
Total Surface Area:	560,000,000 sq. km
Percent Land Mass:	94%
Total Land Area:	530,000,000 sq. km
Surface Conditions	
Length of Day:	25 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	14%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-97
Trade Profile:	DDDDDEF A (B)

Precipice is a dry planet located on the edge of Federation territory, just a short distance from the Klingon Empire. Thus, Precipites are a rather paranoid lot. There are listening and monitoring stations spread throughout the Brightstar system, and any ship entering it is immediately challenged. Because of their proximity to the Klingons, the inhabitants named their world 'Precipice', believing they live on "the edge of disaster." For all their paranoia, the Precipites have virtually nothing to fear from the Klingons because there is nothing whatsoever on the planet that the Klingons want or need.

Precipice has little to distinguish it economically, there being neither mining facilities nor huge agricultural capabilities. The government is representative, ruled by the Senate. The leader of the government is Prime Minister Sasha Velkovki.

There are no serious restrictions against either piracy or the black market on Precipice, but the constant scanning of the system makes pirate or smuggling operations a bit too public to succeed.

World Log: RASHILE

System Data	
System Name:	Ungethiem
Map Coordinates	(8.8S 6.0E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	1
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq. km
Percent Land Mass:	29%
Total Land Area:	190,000,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	2%
Radioactives:	11%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999993-98
Trade Profile:	ADDDCDE D (C)

Rashile is a slightly heavy, Terra-like planet. It is a good place to live, as it has decent soil for growing food crops and many edible native fish. Recently, it has been built into one of the gourmet capitals of the area. The driving force behind the change of emphasis is Rashile Gourmet Foods, Incorporated. Authentic Terran Sturgeon have been imported for caviar production, as have most of the gourmet delicacies from across the galaxy. RGF also collects Finagle's Fists on Yeartes and Air Truffles from Pluuh II.

The government on Rashile is participatory, but controlled by Rashile Gourmet Foods, Incorporated. RGF is a major, Federation-chartered corporation with vast resources. They own a large number of transports, and enough in-system patrol boats to protect their interests both in their own system and in the Triangle. RGF is also one of the few corporations wealthy enough to own both their own system and another.

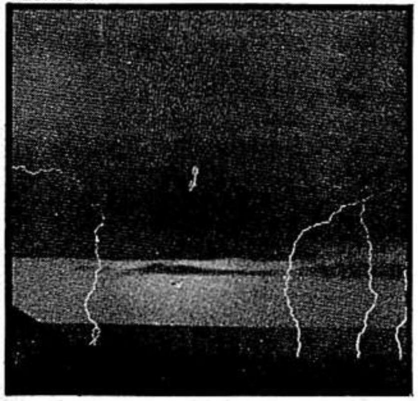
World Log: TURBULENCE

System Data	
System Name:	Ganleiy
Map Coordinates	(8.9S 4.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VII
Number of Satellites:	3
Gravity:	1.4 G
Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	710,000,000 sq. km
Percent Land Mass:	49%
Total Land Area:	350,000,000 sq. km
Surface Conditions	
Length of Day:	23 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	24%
Radioactives:	12%
Gemstones:	Trace
Industrial Crystals:	15%
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-90
Trade Profile:	ECCDFGG D (X)

Turbulence is aptly named. The tropical climate, high gravity, and three moons often combine to cause *very* severe weather patterns across the entire planet. These storms would not be worth braving if not for the rich deposits of dilithium found there.

A relatively small number of miners live and work on Turbulence, carving out the dilithium and selling it to the handful of traders willing to brave the harsh environment in order to make a small profit. Thus, although the miners are mining one of the most valuable commodities in the galaxy, they usually make just enough to pay for the next shipment of supplies. These are usually brought in by the same ships that carry out the dilithium.

There is no government on Turbulence, because the population is much too small to need one. Most of the miners look up to one of their own as unspoken leader of the group. That man is Jan Terling, owner and operator of the only subspace radio on the planet. The miners give their crystals to Terling, who then sells the dilithium to the traders. He then pays the individual miners for their shares in a scrupulously honest fashion.



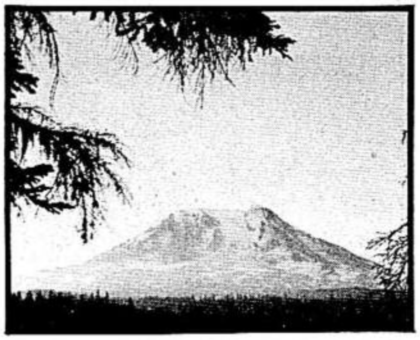
World Log: WALL

System Data	
System Name:	Bahr
Map Coordinates	(8.9S 5.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VI
Number of Satellites:	2
Gravity:	1.2 G
Size	
Diameter:	15,600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	610,000,000 sq. km
Percent Land Mass:	70%
Total Land Area:	430,000,000 sq. km
Surface Conditions	
Length of Day:	32 hours
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	38%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-97
Trade Profile:	HBFDEEA A (B)

Wall is a mining/manufacturing world. Its name is derived from the long, straight rows of high, nearly vertical mountains that wrap aroung the planet. The planet's soil is not much good for growing crops, but there are many rich veins of ores within the mountain ranges.

Wall manufactures some of the finest surface-to-orbit boats in the Federation. The radioactives to run them must be imported, as well as certain low- and medium-tech items such as fabrics and plastics. Wall must also import much of its food supply. The planet's economy is strong and its profits healthy, so Wallians are able to import and enjoy many of the finer things in life.

The government on Wall is a representative democracy. Every six years, there is a general election for all offices, including the Senate and that of the Wallmaster, the planet's executive office. Wall is a Federation ally, and shares system patrol duty equally with Star Fleet. Wall always keeps twenty of its finest boats lightly armed for in-system patrol. Occasionally, a Star Fleet patrol ship will be stationed in the Bahr system, mostly to show the Klingons and Orions that Wall is off-limits. The strategy seems to work.



World Log: YEARTES

System Data	
System Name:	Triangeles
Map Coordinates	(8.7S 6.2E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	2
Gravity:	1.5 G
Size	
Diameter:	19,500 km
Equatorial Circumference:	60,000 km
Total Surface Area:	765,000,000 sq. km
Percent Land Mass:	50%
Total Land Area:	380,000,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	39%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	Unpopulated
Trade Profile:	Unpopulated

Yeartes is a high-gravity tropical planet. Plant and animal life are rather unremarkable except for one parasitic plant that lives in the tops of certain trees. Named Finagle's Fist, the plant is vaguely hand-shaped, and resembles a green fist grasping the branch to which it is attached. Fist, as it is commonly known, is one of the most prized delicacies in the Federation. To prepare it, the plant is first cut into bite-sized chunks and then sauteed with mushrooms (or Air Truffles, *see* Pluuh II).

There is no population on Yeartes; rather, the Fists are gathered by employees of Rashile Gourmet Foods, Incorporated (headquartered on the planet Rashile). The Fists must be gathered from air, as they usually grow on branches much too small to support a Human. Thus, Rashile Foods uses anti-grav platforms to float at treetop level and collect the plants.

Rashile Gourmet Foods also maintains a fleet of ships for the transport of the Fists, and a number of in-system boats to protect the planet. Although the Federation does not approve of private security forces, those on Yeartes are not disturbed. There are a great many ranking Federation officials who are exceedingly fond of the delicacy, as well as the monies that flow from Rashile Gourmet Foods into their political coffers.

World Log: ZWAALAN

System Data	
System Name:	Immel
Map Coordinates	(8.5S 6.0E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	410,000,000 sq. km
Percent Land Mass:	68%
Total Land Area:	280,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	10%
Radioactives:	17%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-95
Planetary Trade Profile:	BCCCDEF B (B)

Zwaalan is an agricultural world with a twist: the 'crop' grown is lumber. Because of a unique combination of light, soil, rainfall, and gravity on the planet, trees grow very fast, tall, and straight. Varying types of lumber are available, simulating most native Terran woods. The chief imports for Zwaalan are most manufactured goods, as well as luxury items.

The government on Zwaalan is a monarchy, currently ruled by King Vassily Illievich. Illievich is something of a xenophobe; he refuses to deal with any race but the Human. Most of the neighboring planets know this, and cater to that quirk of his nature.

Affiliation Of Outer Free Worlds

World Log: ARCHIBALD II

System Data	
System Name:	Archibald
Map Coordinates	(9.2S 5.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	1
Gravity:	1.4 G
Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	714,000,000 sq. km
Percent Land Mass:	37%
Total Land Area:	264,180,000 sq. km
Surface Conditions	
Length of Day:	19 hours
Atmospheric Density:	Thick
General Climate:	Desert
Mineral Content	
Normal Metals:	38
Radioactives:	16
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999784-87
Planetary Trade Profile:	EBCFDBF/A (C)

The economy is based on light manufacturing, powered by solar accumulators constructed in the extensive desert areas. Most living space is underground where the thick, though breathable, atmosphere can be cooled and conditioned for comfort.

A mix of Human and Tellarite settlers founded this industrial colony; because an earlier attempt to colonize this world failed, Archibald natives consider themselves a hardier breed of pioneer. All natives, but particularly the Tellarites, resent the jeering nickname 'Baldies' applied to them.

World Log: BAKER'S WORLD

System Data	
System Name:	Baker's Star
Map Coordinates	(9.5S 6.2E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VI
Number of Satellites:	2
Gravity:	.6G
Size	
Diameter:	7800 km
Equatorial Circumference:	24,000 km
Total Surface Area:	306,000,000 sq. km
Percent Land Mass:	18%
Total Land Area:	55,080,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	33
Radioactives:	22
Gemstones:	6
Industrial Crystals:	Trace
Special Minerals:	12
Cultural Data	
Technological/Sociopolitical Index:	999994-87
Planetary Trade Profile:	DDCFEFG A (B)

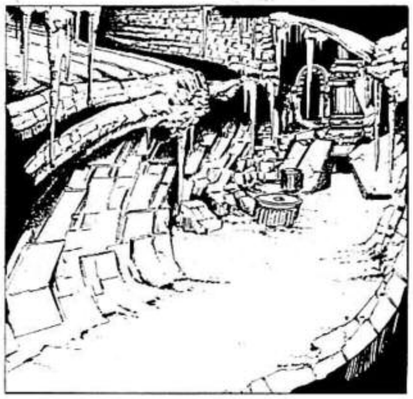
Baker's World, with its fine spaceport at Bakersville, is capital and hub of the AOFW, and it is the source of the unofficial name 'Baker's Dozen' applied to the alliance. This tradeworld is rich in mineral wealth, though much of it is in deep deposits. Its open trade policies are intended to bring in the money to develop the planet's resources.

The inhabitants of Baker's World are proud of their planet and their government. There is virtually no hardcore criminal element, and there are few restrictions on free expression. Though the government is openly representative, the residents are perfectly happy to let the executive control rest with Council President Willis J.F. Baker, latest in the popular and highly charismatic Baker dynasty of leaders and statesmen. President Baker also serves as leader of the AOFW Council.

World Log: COLIL V

System Data	
System Name:	Colil
Map Coordinates	(9.2S 6.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	2
Gravity:	1 G
Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	510,000 sq. km
Percent Land Mass:	90%
Total Land Area:	459,000,000 sq. km
Surface Conditions	
Length of Day:	30 hours
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	16
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	1
Cultural Data	
Technological/Sociopolitical Index:	None
Planetary Trade Profile:	None

Cold, dry, inhospitable Colil V is the site of extensive Preserver ruins, located under the ice, and it has no population other than the scientific station. Unauthorized traffic is prohibited within 1 parsec of the planet, the protected status of the world being backed up by Star Fleet, which has a unique arrangement with the AOFW allowing the vessels and crews to be commanded by AOFW naval officers. The AOFW Science Council allows small, unarmed scientific research teams to inspect the ruins, but only those from cultures that have legitimate claim to Preserver interaction. Delegations from the UFP, Klingon Empire, Romulan Star Empire, Orion Colonies, AOFW, and Vulcan Science Council are resident, along with a large guard force provided by the AOFW.



World Log: DEVOTION

System Data	
System Name:	Covenant
Map Coordinates	(9.7S 6.2E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	0
Gravity:	.6 G
Size	
Diameter:	7800 km
Equatorial Circumference:	24,000 km
Total Surface Area:	306,000,000 sq. km
Percent Land Mass:	86%
Total Land Area:	263,160,000 sq. km
Surface Conditions	
Length of Day:	17 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	43
Radioactives:	Trace
Gemstones:	16
Industrial Crystals:	Trace
Special Minerals:	1
Cultural Data	
Technological/Sociopolitical Index:	453695-94
Planetary Trade Profile:	ABAFECA D (D)

This agricultural planet is settled by The Children Of The Covenant, a splinter religious sect, and is the religious movement's central headquarters.

Founded on Terra, the sect prohibits the use of advanced technology for manufacturing and agriculture. Advanced machinery for agriculture and manufacturing is forbidden on Devotion, as are advanced measuring devices. The craftsmen among the Children seem to be preternaturally patient and precise in their work with handcrafts, capable of microprecise manipulation impossible for most Humans.

The religious movement sends missionaries, called Guiders, as representatives to Human and alien civilizations throughout the known galaxy. The Children Of The Covenant believe that Humans were the 'First Created' and therefore have a responsibility to teach wisdom to all other races. This somewhat condescending attitude makes them somewhat unpopular among non-Humans.

World Log: FOUNTAINWORLD

System Data	
System Name:	Cristl
Map Coordinates	(9.4S 5.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	2
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	408,000,000 sq. km
Percent Land Mass:	56%
Total Land Area:	228,480,000 sq. km
Surface Conditions	
Length of Day:	21 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	14
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-87
Planetary Trade Profile:	GEEEFG D (D)

The land area of most of Fountainworld's main continent is covered with spa-like mineral springs. Fountainworld's water is said to have medicinal qualities of great magnitude, though analysis reveals nothing more than unusual purity. Nevertheless, tourists flock to Fountainworld from all over this area to enjoy the gentle climate, plush hotels, and, of course, the water.

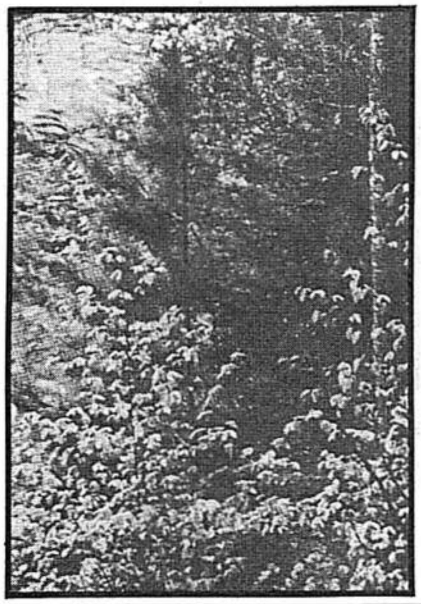
Most of the economic power rests in the hands of the descendants of the original Human settlers, even though the Orions have developed much of the planet's tourism. The native Fountainworlders have managed to keep the Orions from gaining too much political power by cleverly playing the Orion families against each other.

World Log: HOOT

System Data	
System Name:	Hollar
Map Coordinates	(9.4S 6.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VIII
Number of Satellites:	0
Gravity:	.7 G
Size	
Diameter:	9100 km
Equatorial Circumference:	28,000 km
Total Surface Area:	357,000,000 sq. km
Percent Land Mass:	23%
Total Land Area:	82,110,000 sq. km
Surface Conditions	
Length of Day:	22 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	33
Radioactives:	10
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	4
Cultural Data	
Technological/Sociopolitical Index:	999994-87
Planetary Trade Profile:	ACDFFFE B (B)

Hoot, a member of the AOFW, has no trade restrictions, and, hence, no black market. Its major export is foodstuffs, especially the meat of giant Hoot Mountainbeasts. Governments are largely territorial, but most maintain the pretense, at least, of a representative structure. The largest city, Corbie, has an excellent spaceport.

Hoot is wild and woolly, even by Triangle standards. Originally a penal colony, the originating worlds long ago abandoned any hope of controlling the planet's affairs. The social environment is much like the American Old West of legend. The 'law' on Hoot is administered by whoever is best with a phaser. A complex code of personal ethics governs everyday life, requiring a person to fight his own battles and treat with respect and deference those who are faster, tougher, or luckier.



World Log: JAV VII

System Data	
System Name:	Jav
Map Coordinates	(9.4S 6.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VII
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	663,000,000 sq. km
Percent Land Mass:	48%
Total Land Area:	318,240,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	9
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-8 (6)
Planetary Trade Profile:	CEFGDEG B (C)

This tradeworld is a member of the AOFW. As with most tradeworlds, there are no tariffs or import/export duties. The world economy is supported by taxes and rents. Both individuals and corporations are taxed, and rents are collected from land leased to trade associations, trading firms, and the support businesses required by such a trade center.

Jav is wholly owned and operated by the Jav Freetrade Corporation, chartered on Andor and traded on the UFP Stock Exchange. Investors in the corporation are mostly happy, because a good share of the increasing amount of Triangle trade moves through the main port of Javlisig. Orion tradeworlds of the Turnstile cut into Jav profits often, however, and the Jav Freetrade Corporation is attempting vigorously to remain competitive as a trade center. Cooperation between Baker's World and Jav has proved to be a help in this, as has membership in the AOFW.

World Log: MARTIN'S STAR III

System Data	
System Name:	Martin's Star
Map Coordinates	(9.8S 6.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	2
Gravity:	1.5 G
Size	
Diameter:	19,500 km
Equatorial Circumference:	60,000 km
Total Surface Area:	765,000,000 sq. km
Percent Land Mass:	21%
Total Land Area:	160,650,000 sq. km
Surface Conditions	
Length of Day:	31 hours
Atmospheric Density:	Thin
General Climate:	Arctic
Mineral Content	
Normal Metals:	11
Radioactives:	Trace
Gemstones:	20
Industrial Crystals:	Trace
Special Minerals:	5
Cultural Data	
Technological/Sociopolitical Index:	999994-87
Planetary Trade Profile:	FBDFEFG/A (E)

Martin's Star III is the major source for high-quality cobali thermgems, a rare and highly-prized gemstone that can form only at low temperatures. The extreme climate on Martin's Star, and on the few other worlds where the gems occur, makes mining difficult and dangerous.

Thus, the population of Martin's Star III comprises fewer than 10,000 individuals. These are all miners, their families, or support personnel. Mine security is very tight, and visitors are prohibited except by special arrangement. Because a single gem-quality stone can be worth up to 100,000 credits or more when cut and polished, fortunes can be and have been made here, but many miners die in the bitter cold. Many others fail to make a strike and go bankrupt trying to mine enough to pay for their expensive protective gear and cold-proof equipment.

Claims are passed down as legacies from generation to generation, with planetary law prohibiting sale of a claim to anyone except current claimholders. Sale of gemstones, except through the Miner's Association, is also prohibited. It is believed that the powerful Miner's Association maintains a large stockpile of the jewels, selling them only sparingly to keep the price up.

World Log: MAZE

System Data	
System Name:	Zee
Map Coordinates	(9.6S 6.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	0
Gravity:	1.2 G
Size	
Diameter:	15600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	612,000,000 sq. km
Percent Land Mass:	10%
Total Land Area:	61,200,000 sq. km
Surface Conditions	
Length of Day:	21 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	47
Radioactives:	21
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	8
Cultural Data	
Technological/Sociopolitical Index:	999794-87
Planetary Trade Profile:	FABGBDF D

This industrial world is noteworthy for the endless miles of canyons bounded by mountains that give it its name. The metallic content of these mountains is close to the surface and easily mined, and active volcanic channels have been tapped for endless reserves of geothermal power.

Maze was called "the strong arm of the Void" by the Baker's World poet Lee Chan. It is not a green and fertile world, but its work-hardened inhabitants would not wish to live elsewhere. Family pride is important here, and there is a strong work ethic. Trade in purely luxury items is uncommon, as the residents engage in simple leisure activities, disdaining 'soft' living.

A world-wide problem with addiction to steroid-like drugs that build physical strength and endurance at the expense of intellect is said to worry the planetary government a great deal. Such drugs are highly illegal, and smuggling of such drugs can bring the only death penalty left on the books on Maze.

World Log: MORNING GARDEN

System Data	
System Name:	Reason's Beacon
Map Coordinates	(9.7S 6.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	1
Gravity:	.7 G
Size	
Diameter:	9100 km
Equatorial Circumference:	28,000 km
Total Surface Area:	357,000,000 sq. km
Percent Land Mass:	14%
Total Land Area:	49,980,000 sq. km
Surface Conditions	
Length of Day:	28 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	47
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	0
Cultural Data	
Technological/Sociopolitical Index:	999998-97
Planetary Trade Profile:	AAEDFEE/C (C)

Morning Garden, settled by a pacifistic sect of mixed Terran Orientals and Vulcans, depends economically on fishing and agriculture, including cultivation of aquatic plantlife. Violence is abhorrent to the nature of the inhabitants, who will not tolerate violent behavior in any form and deport immediately those who show violent tendencies. Klingons are unwelcome as a planetwide policy because of repeated incidents of violence between them and other visiting outworlders.

Morning Garden's ruling body, The Gathering of Advisors, is currently considering affiliation with the AOFW. It has agreed in principle to trade and mutual protection treaties with the AOFW, and these are in force presently. UFP and Orion negotiators also are courting Morning Garden, however. The government, like the populace, does not make decisions lightly or quickly, and it is likely to be several years before a final decision is reached.

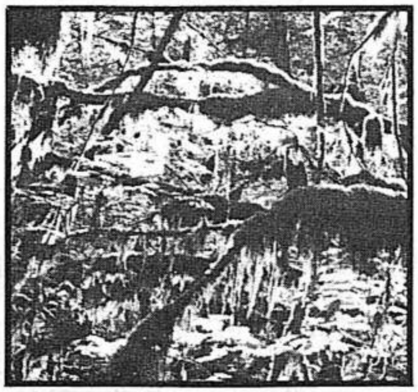
World Log: NEW NEW ABERDEEN

System Data	
System Name:	Halien
Map Coordinates	(9.2S 6.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	2
Gravity:	1.5 G
Size	
Diameter:	19,500 km
Equatorial Circumference:	60,000 km
Total Surface Area:	765,000,000 sq. km
Percent Land Mass:	50%
Total Land Area:	382,500,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	28
Radioactives:	26
Gemstones:	Trace
Industrial Crystals:	1
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-87
Planetary Trade Profile:	DCBFBCE/B (B)

A daughter colony of the economically powerful New Aberdeen industrial planet (a UFP world), New New Aberdeen has become wealthy on the skill of its resident ship designers and builders, and on the completeness of its orbital and surface-based port facilities. New New Aberdeen ships and wealth provide support for the AOFW, and much money obtained by building and repairing ships for outworlders gets funneled back into AOFW coffers through loans and taxes.

The Council Of Clans, the planetary ruling body, is supportive of the UFP and loyal to the original New Aberdeen clans. Even so, New New Aberdeen is one of the political and economic bulwarks of AOFW independence, backing the AOFW during the Colil Crisis against the UFP. Many of the ancient Terran Scottish traditions remain, transplanted from the parent world.

The Klingon Empire made the mistake of defaulting on a ship construction deal here, and so Klingon vessels are barred from the repair facilities, except in life-threatening emergencies. Many local clansmen of the shipwright guilds lost jobs because of the default, and many still hold a grudge because of it.



World Log: NIIC IV

System Data	
System Name:	Niic
Map Coordinates	(9.8S 6.5E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	3
Gravity:	.7 G
Size	
Diameter:	9100 km
Equatorial Circumference:	28,000 km
Total Surface Area:	357,000,000 sq. km
Percent Land Mass:	82%
Total Land Area:	292,740,000 sq. km
Surface Conditions	
Length of Day:	22 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	19
Radioactives:	5
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	022233-23
Planetary Trade Profile:	ADDABBB B (A)

Niic means *light* in the native language of the native race, the Niicali (*light-watchers*). This non-humanoid race of long-limbed marsupial-like sapients lives within a carpet of blue-green moss that covers the entire planet to a depth of several miles, with the exception of the mountaintop spaceport. Their customs and privacy are guaranteed and protected by their agreement as members of the AOFW, but any trading corporations have installations near the spaceport.

The moss (known locally as the *Maalii*, or *life-giver*) is home, food crop, and export item to the Niicali, and it will grow nowhere else in the known galaxy. Derived from various parts of its specialized structure are several valuable drug compounds, expensive luxury food items, and rare protein compounds. The Niicali worship the moss as an intelligent entity akin to a god. Their rites of purification, actually ancient methods of preparing parts of the moss for use or sale, are closed to outworlders.

The Niicali are led by hereditary civil servants, with the administrative jobs being passed along from parent to child. For the most part, Niicali males are mostly laborers, while the females are planners and decision-makers. The Niicali have no interest in advanced technology except high-tech toys, which both children and adults enjoy. Their technological level is not advanced beyond basic horticulture and tool-making, and yet the Niicali apparently have an extremely fast planetwide communication system.

World Log: PAXTON III

System Data	
System Name:	Paxton
Map Coordinates	(9.7S 5.9E)
Number of Class M Present:	2
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,000 km
Equatorial Circumference:	52,000 km
Total Surface Area:	663,000,000 sq. km
Percent Land Mass:	64%
Total Land Area:	424,3200,000 sq. km
Surface Conditions	
Length of Day:	29 hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	32
Radioactives:	27
Gemstones:	17
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999784-77
Planetary Trade Profile:	FBBFEFH B (C)

Paxton III, a member-world of the AOFW settled as a mining colony by Tellarites, has an economy based largely on its underground mines. The world's output is now largely spent on conducting the war it has waged, on and off, with its system neighbor Paxton IV since early in the twin worlds' history. The planet is under martial law, and the Planetary Chief Executive has been granted wide powers during the crisis.

AOFW restrictions keep the conflict from spreading outside the Paxton system. So far, the warfare has been restricted to space battles and attacks on purely military targets. Initiated over mining rights to the uninhabited, atmosphereless world Paxton V, the conflict has long since spread beyond a disagreement over mining rights. Ironically, neither Paxton world currently mines Paxton V, as both have given up after having mining stations there blown up on a regular basis.

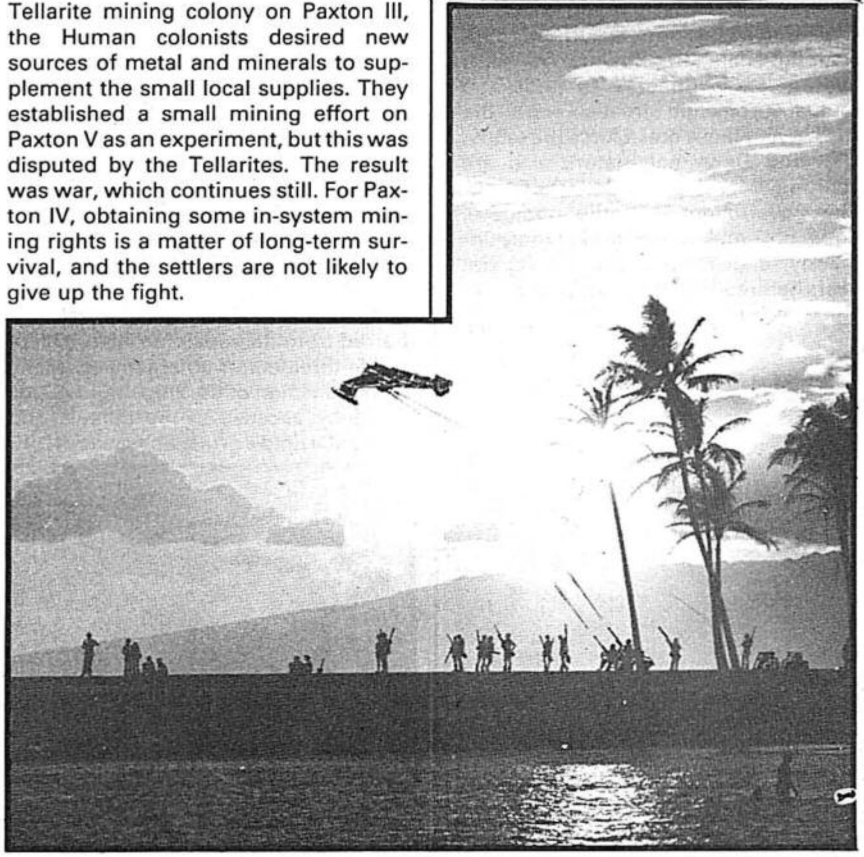
The war effort is no longer as popular as it once was, though Paxton III's economy, largely based on mines safe from enemy attack, remains strong. There are reports of press gangs who forcibly induct visitors and citizens alike into the armed forces, but these are unconfirmed. Such actions against noncitizens would be a violation of AOFW law.

World Log: PAXTON IV

System Data	
System Name:	Paxton
Map Coordinates	(9.7S 5.9E)
Number of Class M Present:	2
Planetary Data	
Position in System:	IV
Number of Satellites:	3
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	663,000,000 sq. km
Percent Land Mass:	35%
Total Land Area:	232,050,000 sq. km
Surface Conditions	
Length of Day:	31 hours
Atmospheric Density:	Thick
General Climate:	Tropical
Mineral Content	
Normal Metals:	18
Radioactives:	17
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999894-87
Planetary Trade Profile:	CFFEFG C (D)

Paxton IV, primarily an agricultural colony, has suffered more from the war with the neighboring Paxton III. This is primarily because its economy is based on fruits and other tropical plants that grow on the surface, and their limited metallic resources force them to purchase much metal from off-world. The War Council of the planet holds most of the real power, with the peacetime government mostly serving as a figurehead.

Settled soon after the settling of the Tellarite mining colony on Paxton III, the Human colonists desired new sources of metal and minerals to supplement the small local supplies. They established a small mining effort on Paxton V as an experiment, but this was disputed by the Tellarites. The result was war, which continues still. For Paxton IV, obtaining some in-system mining rights is a matter of long-term survival, and the settlers are not likely to give up the fight.



Independent Worlds

World Log: ARRIS	
System Data	
System Name:	Aarra (DD45)
Map Coordinates	(12.2S 7.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	X
Number of Satellites:	2
Gravity:	1.3G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	663,000,000 sq. km
Percent Land Mass:	13%
Total Land Area:	86,190,000 sq. km
Surface Conditions	
Length of Day:	25 hours
Atmospheric Density:	Terrestial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	18
Radioactives:	30
Gemstones:	20
Industrial Crystals:	Trace
Special Minerals:	15
Cultural Data	
Technological/Sociopolitical Index:	999787-98
Planetary Trade Profile:	FCBDCEE A (D)

Aarris is an extremely rich world located in a narrow sector between the Romulan and the Klingon spheres of influence. The government is democratic, with a planetwide president, now Sandra Beckzr, elected by all citizens over 16 years of age.

Despite its location, the planet has maintained its independence through a temporary agreement between the two major powers to leave the planet alone. Aarris maintains its neutrality by its willingness to sell to anyone at a fair price. The Klingons and the Romulans both maintain embassies on the planet, as well as powerful military forces in the sector. The Aarrisians have a strong planetary defense force, but are certainly no match for either of the major powers.

The inhabitants have minerals needed by both sides, and sell to both, or trade for technology needed by the planet. The black market is extensive in the system, and even on the planet itself, in spite of easy trade and low tariffs, proving that money in large amounts breeds black marketeers, despite easy legal trade. Zeenne Minerals is the largest corporation on the planet, even maintaining its own trading centers; its owner is considered by many to be the richest man on the planet. Zeenne, although never directly involved in politics, financially backed Sandra Beckzr's campaign.

World Log: ACTONN	
System Data	
System Name:	Heid (K19)
Map Coordinates	(9.6S 5.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VIII
Number of Satellites:	1
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	410,000,000 sq. km
Percent Land Mass:	85%
Total Land Area:	350,000,000 sq. km
Surface Conditions	
Length of Day:	24 hours
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	26%
Radioactives:	12%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999996-96
Planetary Trade Profile:	HCCCEFH B (C)

Actonn is a snow-covered planet governed by a controlled monarchy, with most decisions made by the Cabinet of Ministers. The ruling monarch is Queen Dionna Cassavette, 38. Her son, Prince Merrin, 19, is next in succession. At first glance, Actonn appears to have nothing in its favor. The populace live within domed structures that look like chains of Terran igloos. These are constructed from an insulating ceramic found under the snow, which is then processed for use as a building material.

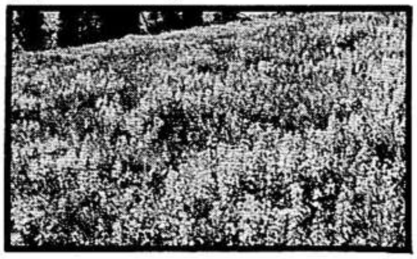
The two major products exported by Actonn are produced by a small creature that burrows through the snow and ice, eating algae-like plant growth imbedded in the ice. This unintelligent cross between a worm and a mole grows to a length of about five inches. The creatures are harvested for both their fur, which is useful as an insulating material, and for a chemical their bodies manufacture. The chemical is refined into a medium-level sedative that has virtually no side effects.

World Log: AKERS IV	
System Data	
System Name:	Akers
Map Coordinates	(10.5S 7.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	0
Gravity:	.7 G
Size	
Diameter:	9100 km
Equatorial Circumference:	28,000 km
Total Surface Area:	360,000,000 sq. km
Percent Land Mass:	23%
Total Land Area:	82,000,000 sq. km
Surface Conditions	
Length of Day:	22 hours
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	25%
Radioactives:	29%
Gemstones:	16%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999993-97
Planetary Trade Profile:	AFFDCEG/D (B)

The government on Akers IV is representative, with the Akeride (senate of Akers) elected every three years. The Akeride Master, currently Isao Namaguti, is selected by the Akeride from their own ranks to serve as leader and representative. Though the people of Akers will trade with the Romulans, most trading takes place with the traders of Rem fry.

Akers is the galaxy's only source of flower crystals, grown from mutated flowering plants that grow abundantly on the planet's surface. Though the plants can be grown on other planets, they produce the crystals only in the soil and atmospheric conditions found on Akers IV.

The planet's high radioactives content is theorized to have some part in the growth of the crystals, thus no mining is allowed anywhere on Akers. Because mining is prohibited, minerals and radioactives must be imported. The planet has no need to import food, however, as crops sufficient to supply the population are grown on Akers.



World Log: ALTHARRA IV

System Data	
System Name:	Altharra
Map Coordinates	(10.6S 6.7E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	0
Gravity:	.9 G
Size	
Diameter:	11,700 km
Equatorial Circumference:	36,000 km
Total Surface Area:	459,000,000 sq. km
Percent Land Mass:	88%
Total Land Area:	403,920,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Thick
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	32
Radioactives:	Trace
Gemstones:	17
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	866652-67
Planetary Trade Profile:	AAFDCDF/B (C)

Situated midway between the Klingon and the Romulan influence in the Triangle, Altharra IV is located just spinward of the Mantiev Colonial Association. The Altharrans are a peaceful people, and their bargaining chip in any negotiations is their usefulness as food producers and exporters. The planet has only small, in-system defense forces. Ground forces are immense, but are technologically outclassed by most of their neighbors. No major power has attacked them, simply because there has been no need to.

The Altharrans are exporters of food products and low-technology agricultural implements. They are known to supply both factions of the Mantiev conflict with foodstuffs. Basically, the Altharrans will sell to anyone who can pay the price. In exchange for their exports, they import high-technology goods.

Most trading is done through the Agrarian League, which serves as a combination clearinghouse and trade union. Normally, a farmer will list the product he has available for trade with the League. The League credits his account in an equal amount of currency, then sells the goods off-world, keeping a percentage for handling the deal. The goods received in exchange are then sold to League-controlled centers. The black market on Altharra is small, existing in small groups in order to circumnavigate the League's control. To encourage enough trade to improve conditions, tariffs are kept low.

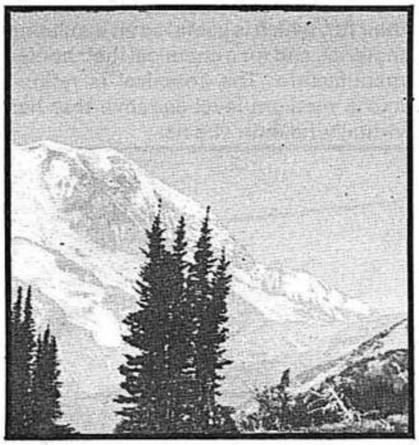
There are many nations on Altharra, each with its own form of government. League of Nations, it is mostly a showcase: the real power on Altharra is the Agrarian League which controls trade. Portan, the largest producer in the League, is its President.

World Log: BALLARD'S MINT

System Data	
System Name:	Tarantos (R31)
Map Coordinates	(10.8S 6.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	2
Gravity:	.6G
Size	
Diameter:	7,800 km
Equatorial Circumference:	24,000 km
Total Surface Area:	306,000,000 sq. km
Percent Land Mass:	93%
Total Land Area:	284,580,000 sq. km
Surface Conditions	
Length of Day:	28 hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	32
Radioactives:	30
Gemstones:	12
Industrial Crystals:	3
Special Minerals:	7
Cultural Data	
Technological/Sociopolitical Index:	998653-87
Planetary Trade Profile:	DCBEEFF/B (C)

This fiercely-independent planet relies on its ties with the Federation to maintain its neutrality. Ballard's Mint has trade agreements with the Federation, and receives a token Federation military force for protection. This force, consisting currently of three scout vessels and a Federation Marine Battalion, could never stop a Klingon thrust militarily. The Klingons tend to leave the planet alone, however, because the implication of any such attack would be enormous: war with the Federation.

Ballard was the name of the woman who discovered the planet; the 'Mint' part of its name came from the fact that the planet was so mineral-laden. At first, the term was applied jokingly, but then it simply stuck. The planet relies on on its heavy mineral exports to keep the Federation interested. The government has no desire currently to join the Federation, as it is getting what it needs, neutrality, without what it considers the heavy price of membership. The black market is large here, as rare minerals are sold at high prices to whomever will pay. Tariffs are low in order to encourage trade.



World Log: BICKETT

System Data	
System Name:	Casiday
Map Coordinates	(10.1S 6.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VIII
Number of Satellites:	1
Gravity:	1 G
Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	510,000,000 sq. km
Percent Land Mass:	49%
Total Land Area:	250,000,000 sq. km
Surface Conditions	
Length of Day:	31 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	10%
Radioactives:	16%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999993-98
Planetary Trade Profile:	GCCDCAF/A (B)

Bickett is a lush, tropical planet. Although it has small oceans, there are many inland lakes and rivers keeping most of the planet well-irrigated. The equatorial regions are hot and wet, and so unsuitable for comfortable living. The polar regions are perfect climatically, however, and much of the population lives in those areas. Bickett might have been an agricultural planet if its native growth had not proved too hardy to be pushed aside for other crops. It does, however, provide excellent raw materials for the manufacture of plastics, polymers, and many synthetic fabrics and textiles. These are exported, along with some of the more exotic plant varieties. Imports include foodstuffs, high-tech items, and luxury items.

The government on Bickett is participatory, with major negotiations conducted by the Headman, Andi Babsinn. The Headman functions more as ostensible leader because most world-affecting decisions are made by election. Bickett tends to favor the Federation and Baker's Dozen over the Klingons, mostly out of racial preference. Bickett has no in-system patrol, preferring to leave that to the traders themselves.

World Log: CANCHICKA

System Data	
System Name:	Canch
Map Coordinates	(11.8S 7.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	3
Gravity:	1.1G
Size	
Diameter:	14,300 km
Equatorial Circumference:	44,000 km
Total Surface Area:	561,000,000 sq. km
Percent Land Mass:	14%
Total Land Area:	78,540,000 sq. km
Surface Conditions	
Length of Day:	25 hours
Atmospheric Density:	Terrestial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	46
Radioactives:	26
Gemstones:	18
Industrial Crystals:	Trace
Special Minerals:	7
Cultural Data	
Technological/Sociopolitical Index:	986550-66
Planetary Trade Profile:	CCEEDFF/A (D)

Canchicka is another of those planets whose neutrality hangs by a very thin thread. Placed between the Klingons and Romulans, it has endured solely because both major powers have signed an agreement allowing Canchicka to remain neutral. This occurred as a by-product of the last trade agreement between the Romulans and Klingons. Both maintain embassies on-planet, and both maintain large military forces within five days travel. The Canchickians wish to remain independent, with little hope of doing so.

Minerals are the planet's main export, with the Cinudy standing out among them. A gem whose beauty is considered by many to be unrivalled in the galaxy, the Cinudy can be cut and polished for many uses. Most go into making rings, necklaces, and other jewelry. The gem, which is very hard, also has industrial uses on medium- or low-technology planets.

Duke Morann, the richest man on the planet, controls 31% of the Cinudy mines. The underwater mines are extremely expensive to operate. This, combined with the rarity of the gem, makes the prices very high. Tariffs are low on the planet in order to encourage trade. The already-inflated high prices on the gems have made Canchicka a rich planet. Federation officials have compared the government of the planet to a small boy just given a large increase in his allowance: There is "money to burn".

The planet is run by the Forall, a form of parliament similar to the Terran British Parliament of earlier times. The Forall is run as efficiently as any such body can be. The government is currently appealing to the Federation for military assistance, but little is forthcoming because of the distances involved and the political situation between the Big Three.

World Log: COMSTOCK

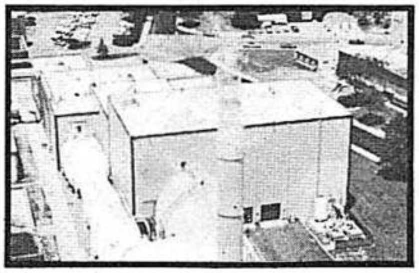
System Data	
System Name:	Schull
Map Coordinates	(8.5S 6.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	3
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq. km
Percent Land Mass:	96%
Total Land Area:	630,000,000 sq. km
Surface Conditions	
Length of Day:	25 hours
Atmospheric Density:	Thin
General Climate:	Desert
Mineral Content	
Normal Metals:	2%
Radioactives:	10%
Gemstones:	8%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-97
Planetary Trade Profile:	FEEECEG A (C)

Comstock is a tradeworld run by BioResearch. Much of the planet is hot and dry, and is very nearly uninhabitable. The one major trade city is also named Comstock. Comstock City is located on the shore of the planet's single, land-locked polar sea. The starport, five miles to the south, is connected to the city by monorail.

Since Comstock is a tradeworld, virtually anything is available for sale. Buyers are set up to purchase cargos, and warehousers will generally have many cargos awaiting shipment. There is also a heavy black market on Comstock, and so many items may become available for a price. Traders are cautioned to be careful when leaving the city for any reason, as there are rumored to be privateers working out of the mountains to the south.

Many corporations have facilities on Comstock, including Triangle Shipping, Leederlee Component Manufacturing, and Luxury Apparel.

Comstock has no alliegiance to any of the major governments, although a large number of Orion traders frequent the area. There is no real planetary security on or around Comstock, as traders tend to police their own. BioResearch controls a security office for maintaining the peace in the city.



World Log: CURRIE

System Data	
System Name:	Faulk
Map Coordinates	(9.0S 6.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number Of Sattelites	****
Gravity:	1.4 G
Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	710,000,000 sq. km
Percent Land Mass:	85%
Total Land Area:	610,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	49%
Radioactives:	37%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-98
Planetary Trade Profile:	GAADEFG A (X)

Currie is a large, cold planet. Its air is nearly unbreathable, and so most of the population lives underground. A mineral-rich planet, Currie's major exports are radioactives and normal metals. Its imports include foodstuffs, finished products, and luxury items. Most of the planet's trade is conducted with the traders at Remfry and Baker's Dozen. There is no black market at all on Currie.

The government on Currie is participatory, as the population is very small. The closest thing to a planetary leader is the Portmaster in Currie's single, above-ground city.

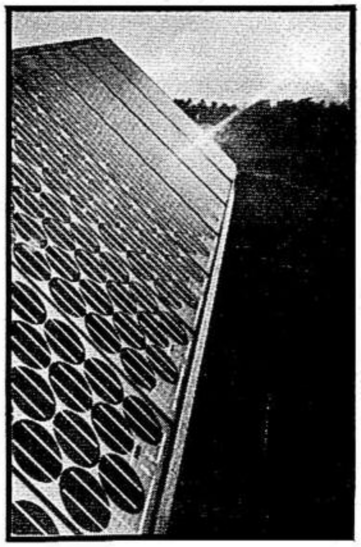
World Log: DEERLAM

System Data	
System Name:	Miley
Map Coordinates	(10.2S 6.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	X
Number of Satellites:	0
Gravity:	1.5 G
Size	
Diameter:	19,500 km
Equatorial Circumference:	60,000 km
Total Surface Area:	770,000,000 sq. km
Percent Land Mass:	71%
Total Land Area:	540,000,000 sq. km
Surface Conditions	
Length of Day:	32 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	38%
Radioactives:	Trace
Gemstones:	13%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-94
Planetary Trade Profile:	BAFEEEG/B (A)

Deerlam is a large, heavy mining world. The populace is short, stocky, and very strong. Deerlamen mine both gems and metals, which they smelt and process themselves. In many regions, the soil conditions are perfect for growing food crops.

Deerlam exports metals, raw gems (to Geisling), and soldiers. In the central Triangle, rumor has it that two Deerlamen are equal to any three soldiers. They are stong, agile, and cunning. Imports include weapons, tech items, and medical products.

Deerlam is a feudal society, with the small families answering to the dukes and barons, who then answer to the Emperor. Carl Sammons became Emperor five years ago, when he led his Deerlamen in a crusade to free Geisling from the Romulans. Deerlamen despise the Romulans, and protect their system with armed patrol ships purchased from Baker's Dozen.



World Log: EPLIEY

System Data	
System Name:	Seidl
Map Coordinates	(10.4S 6.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VI
Number of Satellites:	0
Gravity:	.6 G
Size	
Diameter:	7800 km
Equatorial Circumference:	24,000 km
Total Surface Area:	310,000,000 sq. km
Percent Land Mass:	86%
Total Land Area:	260,000,000 sq. km
Surface Conditions	
Length of Day:	17 hours
Atmospheric Density:	Thick
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	26%
Radioactives:	1%
Gemstones:	8%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-9
Planetary Trade Profile:	GBCEBAA/A (A)

Epliey is a small, cool planet, known in the area as a phenomenal manufacturer of medium- and high-tech items. Using the raw materials found on their planet, the Eplieyans are capable of producing a vast array of goods such as machine parts, air, water, and ground vehicles, and weaponry. They also mine and export a large number of gemstones, including the rare Tubestones (tubelike formations of an aluminum crystal that has a bell-like tonal quality when suspended and struck gently). Imports include foodstuffs, some radioactives, and certain luxury items.

Epliey's governmental structure is somewhat feudal. The major manufacturing organizations are each run by one family, headed by a duke. Smaller, less important families tend to work in factories owned by the dukes. The governmental head is the Baron, whose job it is to negotiate and deal with any outside governments, both for security and trading purposes. Epliey tends to deal more with the Romulan colonies, but that is only due to their proximity. A large amount of trading also takes place with the nearby tradeworld, Remfry.

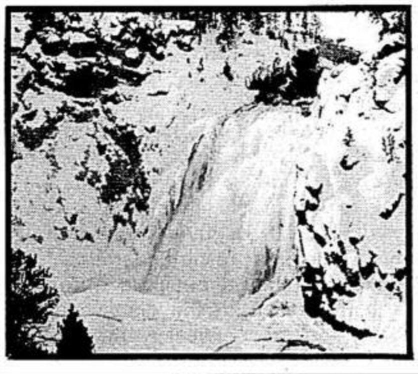
World Log: FARKIN

System Data	
System Name:	Markhamm
Map Coordinates	(10.4S 6.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	2
Gravity:	.6 G
Size	
Diameter:	7800 km
Equatorial Circumference:	24,000 km
Total Surface Area:	310,000,000 sq. km
Percent Land Mass:	40%
Total Land Area:	120,000,000 sq. km
Surface Conditions	
Length of Day:	28 hours
Atmospheric Density:	Thin
General Climate:	Arctic
Mineral Content	
Normal Metals:	18%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999991-98
Planetary Trade Profile:	GBBADFH B (D)

Farkin is a cold, low-gravity world. Its air is thin, and, away from the domed cities, supplemental oxygen supplies are necessary. There are some metals and radioactives found and mined on the planet, but these are not exported. All the raw materials needed on Farkin and much of its equipment must be imported. Farkin's chief products and exports are medical supplies and pharmaceuticals, as the combination of low gravity and low temperatures were found to be ideal for their manufacture. These products include many types of sedatives and stimulants, Tri-ox base, as well as a number of antidotes and anti-tioxins. All the raw materials and much of the equipment must be imported.

The population of Farkin is small, with an abnormally high percentage of biologists and engineers. Its government is participatory. The mayor of Farkinfeall, Farkin's capital city, is considered to be the leader of the planetary government.

Farkin society is rather apolitical, and its people trade with almost anyone, even the Klingons. Klingons prefer to trade with them in orbit, however, because Farkin's well-below-zero surface temperatures.



World Log: FLITNER V

System Data	
System Name:	Flitner
Map Coordinates	(9.3S 6.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	0
Gravity:	1.2 G
Size	
Diameter:	15,600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	610,000,000 sq. km
Percent Land Mass:	37%
Total Land Area:	230,000,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	12%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999993-95
Planetary Trade Profile:	ADDDCEG A (B)

Flitner V is an agricultural world, growing many different products. In fact, almost any foodstuff imaginable can be found on the planet. Toward both poles, grain crops grow very readily. At the equator, fruit plants are abundant. The ocean is mildly salty, and the fish are generally quite edible. Flitner exports a large amount of foodstuffs, while importing most of the higher-tech items needed by their society. There is a surprisingly large black market on the planet, with Federation and Romulan manufactured goods being most prevalent. Klingon goods are unavailable, and Orion goods are more difficult than usual to obtain.

Flitner V is a monarchy, ruled by King Kapri Nider. Nider is 65, and has two sons; Prince Danni, 40, and Prince Rallin, 38. Both are vying for the throne, with Danni favoring independent status, and Rallin wishing for entry into Baker's Dozen.

World Log: FLOOD

System Data	
System Name:	Juncker
Map Coordinates	(10.3S 5.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	2
Gravity:	1.2 G
Size	
Diameter:	16,000 km
Equatorial Circumference:	48,000 km
Total Surface Area:	610,000,000 sq. km
Percent Land Mass:	21%
Total Land Area:	130,000,000 sq. km
Surface Conditions	
Length of Day:	31 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	46%
Radioactives:	29%
Gemstones:	Trace
Industrial Crystals:	8%
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-96
Planetary Trade Profile:	GBBDCEG/B (B)

Flood is an independent water world with mild leanings toward the Klingon Empire. Most of its cities are underwater, because the weather is very unpredictable. The tides from the two moons cause very extensive flooding, which has given the planet its name. There are a few safe, high plateaus that are safe, and large cities are located on each.

Flood's major exports are raw metals and radioactives, which are extracted from the sea water and picked up from the ocean floors in the form of mineral nodules. Flood does not have a very extensive food supply, though, and requires the import of foodstuffs as well as the higher technological items.

A small black market exists on Flood, with the most easily obtained items of Klingon manufacture.

The government on Flood is a controlled monarchy, with the Precept, Miklin Jandosti, having limited ruling powers. Major decisions are made by the Flood Senate. System security is handled by the Juncker Irregulars, a navy made up of Flood volunteers. There are generally about six in-system boats in use at any given time.

World Log: FOOLED AGAIN

System Data	
System Name:	Timmigh
Map Coordinates	(11.3S 7.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	1
Gravity:	.9G
Size	
Diameter:	11,700 km
Equatorial Circumference:	36,000 km
Total Surface Area:	459,000,000 sq. km
Percent Land Mass:	99%
Total Land Area:	454,410,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestial
General Climate:	Arctic
Mineral Content	
Normal Metals:	41
Radioactives:	Trace
Gemstones:	18
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	888763-97
Planetary Trade Profile:	FBCDEFF/D (X)

Frann Ulich is credited with the name this planet bears today. Ulich and her crew of 36 had set out on an expedition to investigate reports of a lush, beautiful, high-resource planet in this sector. Almost from the beginning, they met with problem after problem. Their sensors continued to work, however. While their ship was in orbit, the sensors revealed that beneath the thick clouds lay what they were looking for. When they came down for a closer look, the sensors still showed them what they wanted to see. Upon breaking through the clouds, however, they were greeted with nothing more than snow and ice. When they attempted to gain altitude and return to orbit, the ship would not cooperate. Captain and crew lost control, crash-landing in a mountain range near the equator.

When rescuers finally arrived, Ulich's crew decided the planet was not so bad after all, and stayed to establish a small colony. Their decision may have had something to do with the discovery of a beautiful new blue gem they named Icealia. The gem remains the colony's major export, with small animals and a hardy bluish flower comprising the rest. The flower, named Snow Blue, is in demand by florists the galaxy over, who are willing to pay high prices for the unusual bloom. The colony must import most of their needs.

The planet is independent, trading freely with anyone who will. The Romulans recently sent a landing party to investigate, but, finding nothing of real use to them except for hard-to-mine minerals, they have no plans to move against the planet at this time.

World Log: FREEMAN'S PORT

System Data	
System Name:	Sivzunn
Map Coordinates	(10.7S 6.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	I
Number of Satellites:	2
Gravity:	.9G
Size	
Diameter:	11,700 km
Equatorial Circumference:	36,000 km
Total Surface Area:	459,000,000 sq. km
Percent Land Mass:	96%
Total Land Area:	440,640,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	22
Radioactives:	26
Gemstones:	13
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	998776-98
Planetary Trade Profile:	EDCEDEF/B (C)

This independent world is one, large merchant's bazaar. The black market is large and well-stocked, due to its location between the Klingons and the Romulans. If willing to pay the price, one can obtain many of these two cultures' goods here on Freeman. Tariffs are high on incoming non-Romulan goods, however.

Despite its proximity to Romulan-controlled space, the Romulans have never made any real threats on the government. The Romulans are so involved with nearby Mantiev that they simply do not have enough troops to spare to subjugate the planet. Freeman's small military fleet of 32 warp vessels would not hold out long against the might of the Romulan Empire, and the planet is too far from the Federation to expect much help from that quarter. But the Freemen fear Klingon rule more than Romulan rule.

The Freemen are highly skillful negotiators. They are attempting, at the moment, to reach an agreement with the Romulans. With their vast mineral wealth, the Freemen are seeking to purchase vessels from the Romulans, partially to show their willingness to coexist peacefully. The Romulans have responded favorably, although no vessels have as yet been sold. They are, however, trading technological equipment and methods with the Freemen. The planet has an orbital *F-2* repair facility.

This planet has an interesting form of government. Everyone over the age of 14 votes directly into a large tabulating system. Whenever there are several issues to be decided, it is mandatory that all eligible citizens vote. There is a ruling council composed of representatives from all sectors, chosen by their peers. This council handles day-to-day matters, with the citizenry voting on all major issues directly.

World Log: GAMON

System Data	
System Name:	Jeist
Map Coordinates	(8.6S 6.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	3
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq. km
Percent Land Mass:	35%
Total Land Area:	230,000,000 sq. km
Surface Conditions	
Length of Day:	31 hours
Atmospheric Density:	Thick
General Climate:	Tropical
Mineral Content	
Normal Metals:	2%
Radioactives:	4%
Gemstones:	1%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-96
Planetary Trade Profile:	CFEDDAE A (A)

Gamon is a heavy, tropical planet. There is very little metals mining on Gamon, and the general climate and soil are not right for growing food crops. The Gamonites are, however, excellent toolsmiths. They import a good quantity of raw metals from neighboring Jemison, which they work into finished metals and medium-tech instruments and tools. Gamonites are not very fussy about quality, so any merchandise bought from them will be only poor to good quality.

The populace on Gamon is mostly Human, with some Tellarite mixed in. As most Gamonites are fairly hedonistic, they are a good market for just about any kind of luxury item available. The black market on Gamon is fairly strong, and it is normal to find both Federation and Romulan merchandise for sale.

The government on Gamon is considered to be a controlled monarchy. For the past 20 years, Emperor Dade Hargrave has been either mad or senile, and all government functions are performed by his cabinet of advisors. Rumors place Chief Advisor Ilf de Mione as the real force behind the throne. Hargrave has no close relatives, and Gamon law does not provide for insanity in its laws of succession.

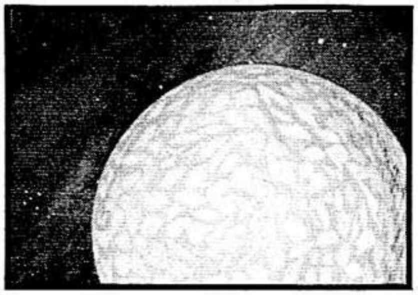
World Log: GEISLING

System Data	
System Name:	Anconna
Map Coordinates	(9.9S 6.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	I
Number of Satellites:	2
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	410,000,000 sq. km
Percent Land Mass:	56%
Total Land Area:	230,000,000 sq. km
Surface Conditions	
Length of Day:	21 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	8%
Radioactives:	Trace
Gemstones:	14%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-97
Planetary Trade Profile:	EBFEDHH/D (C)

Although originally settled by Humans, Geisling was a captive Romulan colony until five years ago. At that time, the Humans on Geisling revolted against the Romulan troops stationed there, with the help of a large number of mercenaries from Remfry. The revolution laid to waste much of the old Geisling, but new cities have been built in the years since. The Romulans have not made any effort to reclaim Geisling, both because they are spread rather thin through the area, and because Geisling receives ships and supplies from Baker's Dozen, as well as from Remfry and Deerlam.

Geisling manages to pay for all this aid by means of a series of gemstone mines scattered across the surface of their planet. Diamonds, Starstones, and ColdFlame Gems are just some of the jewels exported by Geisling. The Jewelers Guild on Geisling includes some of the most skillful and imaginative in the galaxy, which is why the Romulans kept the Humans around in the first place.

Geisling has a representative government, in which everyone is free to vote. The leadership is elected every three years, which places Docca Leo in his second term as President. The Geislingers are very friendly with Baker's Dozen, and most of the independent governments in the area. They hate Romulans with a vengeance.



World Log: GIBRALTAR

System Data	
System Name:	Janissie
Map Coordinates	(8.1S 7.0E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	1G
Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	510,000,000 sq. km
Percent Land Mass:	90%
Total Land Area:	459,000,000 sq. km
Surface Conditions	
Length of Day:	30 hours
Atmospheric Density:	Terrestial
General Climate:	Arctic
Mineral Content	
Normal Metals:	16
Radioactives:	28
Gemstones:	15
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	Federation/Romulan
Planetary Trade Profile:	FDCDDEF/C (X)

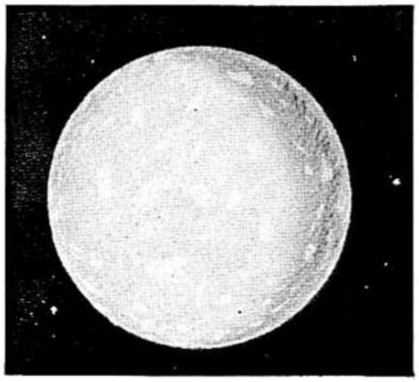
Gibraltar forms one corner of the infamous Triangle. An ice-covered planet, it lay unclaimed and unwanted by all until 2/1801.13. On that date, a Federation delegation waited in a warm structure erected by UFP Engineers to meet with the Romulans, who had announced they wished to establish a permanent location for talks with the UFP. The Romulans had not softened their attitude toward the Federation. On the contrary, the Romulans have always been realists, and their situation dictates that they cannot fight the Federation and the Klingons at the same time. As they feel the Klingons to be the bigger menace, the Romulans needed at least a stand-off between themselves and the Federation.

The Federation, of course, was more than happy to do whatever they could to maintain peace. It was decided to choose an uninhabited planet between the two powers, and one was found in the Janissie system. When asked by the Romulans what the name of the planet was, someone in the Federation diplomatic corps could not resist baptizing the planet Gibraltar. The two powers agreed to divide the planet equally. They would build a domed settlement on the dividing line at a point agreeable to both sides. Here, even the diplomatic station and the discussion table would be equally divided.

Both sides maintain military forces on the planet, as well as extensive surveillance systems with defensive weapons. There have been no problems between the opposing forces thus far. Civilians are allowed on Gibraltar under the terms of the current treaty. Under civilian guise, the Federation operates some mines on the planet, but they are being worked by a military-controlled company.

Almost all items needed must be brought in, with free traders selling to both sides. The planet is rich in radioactives and gemstones. The Federation mines these with a military-controlled company, as do the Romulans. Except for military intelligence, these metals are the only export of the planet. No skirmishes have occurred here, but both sides are prepared for a fight if necessary. Many arguments or misunderstandings have flared into crises, but cool heads have prevailed so far.

The Federation maintains low tariffs, while the Romulan tariffs are high to discourage most traffic, as they prefer to buy elsewhere and ship in what they need. The black market is quite extensive, with small military items being bought for shipment elsewhere.



World Log: HADALIB V

System Data	
System Name:	Hadalib
Map Coordinates	(9.8S 5.7E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	1
Gravity:	.7 G
Size	
Diameter:	8900 km
Equatorial Circumference:	28,000 km
Total Surface Area:	357,000,000 sq. km
Percent Land Mass:	70%
Total Land Area:	250,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	48%
Radioactives:	17%
Gemstones:	14%
Industrial Crystals:	7%
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	AAAAAA-98
Planetary Trade Profile:	BACDBDG/A (B)

Hadalib V is an agricultural planet, with average mining and manufacturing activity. Most arable land is lush and very well-tended. The planet is heavily-populated, with most of its inhabitants concentrated in the urban centers. Hadalibans tend to be semi-reclusive, preferring to keep to themselves and remain as self-sufficient as possible. They will do some trading with outside sources, but mostly for high-tech and luxury items. Grain crops and agricultural byproducts are the planet's main exports. Hadalib V does have a small, but lucrative black market.

The government in power is a participatory democracy. Minor governmental decisions are made by The Council, which is elected each year. Major decisions are always made by popular decision, with 'decision elections' being called at a moment's notice. Hadalib V does have a military, but it is used more for police function than for conquest or battle. There is also a small, but viable, fleet of insystem boats that is generally used to patrol the system.

World Log: JEMISON

System Data	
System Name:	Fithienne
Map Coordinates	(8.5S 7.1E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	1
Gravity:	1.4 G
Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	710,000,000 sq. km
Percent Land Mass:	77%
Total Land Area:	550,000,000 sq. km
Surface Conditions	
Length of Day:	19 hours
Atmospheric Density:	Thick
General Climate:	Desert
Mineral Content	
Normal Metals:	41%
Radioactives:	9%
Gemstones:	14%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999993-90
Planetary Trade Profile:	FABDDEF/A (C)

Jemison is a very dry planet, with most of its surface given over to either deserts or rocky mountains, canyons, and plateaus. It is within these mountains and canyons that Jemison's wealth is found. This desert planet is very rich in metal ores, radioactives, and raw gemstones, which are mined all across the planet, and sold to traders landing at the one main port city, Goldport.

Jemison has no real government, as most of the miners and prospectors prefer to work alone, and only come into town when they have something to sell, or need more supplies. *All* sales are conducted through Jemison's broker, Jean Carislon. Carislon is very ruthless, and anyone trying to cut her out is not likely to repeat the mistake twice. She has an extremely large organization, and her 'enforcers' are *very* persuasive. Carislon is, in fact, the closest Jewison comes to having a planetary government. She will deal with anyone who will pay her prices.

Piracy is not entirely uncommon in the system, but traders are willing to risk the rare raid because the profits to be made from sale of the various ores are worth it. The black market is also strong on Jemison.

World Log: LANROCHE VIII

System Data	
System Name:	Lanroche
Map Coordinates	(9.4S 5.5E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VIII
Number of Satellites:	1
Gravity:	1.1 G
Size	
Diameter:	14,300 km
Equatorial Circumference:	44,000 km
Total Surface Area:	560,000,000 sq. km
Percent Land Mass:	94%
Total Land Area:	530,000,000 sq. km
Surface Conditions	
Length of Day:	25 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	14%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999992-97
Planetary Trade Profile:	DDDDDDD/C (C)

Lanroche VIII is a tradeworld placed equidistant from the Federation, the Klingons, the Turnstile, and Baker's Dozen. Anything and everything is available here, for a price. Once a trader has aquired a broker, virtually any legal cargo may be purchased. The black market is also rich on Lanroche VIII.

Pirates and privateers will have nothing to do with the Lanroche system. For every pirate trying to operate near Lanroche, there are 50 bounty hunters waiting to claim any and all prizes. Physically, Lanroche VIII is a warm, dry planet with small inland seas and great grasslands. Lanroche City, the major trading port, is on the shore of one of these seas, with its starport on an island offshore.

Government on Lanroche is representative, with the Council of Managers elected each year. The Council then elects one of its own to the position of Lanroche Manager, who also serves one year. As with many tradeworlds, the ruling body more resembles a corporate board of directors than a planetary government.

World Log: LENDIS WAVAMM III

System Data	
System Name:	Lendis Wavamm
Map Coordinates	(11.3S 6.5E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	3
Gravity:	1.3G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	663,000,000 sq. km
Percent Land Mass:	76%
Total Land Area:	503,880,000 sq. km
Surface Conditions	
Length of Day:	23 hours
Atmospheric Density:	Terrestial
General Climate:	Tropical
Mineral Content	
Normal Metals:	23
Radioactives:	22
Gemstones:	19
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	887655-66
Planetary Trade Profile:	BDDECFF/C (E)

Lendis Wavamm has a strong military. Although they do not possess warp technology, they have been in negotiation with the Romulans to purchase vessels with warp drive. The Romulans, in turn, are very anxious to negotiate with the Lendissians. The planet is located quite close to the Klingon sphere of influence, and the Romulans are hopeful of exchanging vessels for rights to bases on Lendis. The Federation and the Klingons are also attempting negotiations, but the Lendissians are leaning toward the Romulans because of similarities between their societies. For example, the Lendissians adhere to very formal rituals in all their public activities, for which the Klingons have no patience at all.

Lendis Wavamm is relatively rich in radioactives, which are the main export. Foodstuffs follow a close second. The planet's most sought-after imports are medium- and high-tech items. Drugs and other medicinal agents are also in high demand. The land is all owned by the nobility, as are the manufacturing centers. Thus, although there is a large black market on the planet, most of the lower class have nothing of value to trade. To encourage trade, the government is keeping tariffs low. The tariff system is quite arbitrary, however; the Romulans, for example, pay lower tariffs than the Federation or Klingons.

Theft is rampant on Lendis, which has led to the formation of a large internal security force controlled directly by the King. On Lendis, most authority rests with the monarch, while the prime minister's main job is the enforcement of laws. Bribery is rampant on Lendis, and nothing can be accomplished on the planet without them.

World Log: MEADOW

System Data	
System Name:	Adye
Map Coordinates	(8.6S 6.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	.8 G
Size	
Diameter:	10,000 km
Equatorial Circumference:	32,000 km
Total Surface Area:	410,000,000 sq. km
Percent Land Mass:	68%
Total Land Area:	280,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	10%
Radioactives:	17%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999991-98
Trade Profile:	ADDDDDD D (B)

Meadow is an "ecologically perfect world." As such, the entire populace is *very* careful about the planet's ecology. Stiff punishments are dealt to those damaging any resource. Thus, mining is taboo, even though the amount of metals and radioactives present would make it worthwhile.

Meadow is agricultural, growing and exporting many excellent grain and seed crops each year. Meadowites do not import many luxury items, preferring a simple, stoic existence. The major imports are farm equipment and base necessities. There is *no* black market at all, and all imports are assigned a flat ten percent tariff, no matter what the item.

The government is participatory, run by the Assembly of Elders. The leader of the Assembly is Elder Sister Kalan DeVries. The other major force in the government is Elder Brother Vran Cafri, who controls the Ecological Force. This is Meadow's version of a security force and environmental protection agency rolled into one.

Meadow is a Federation ally, and ships most of her crops to Federation buyers.

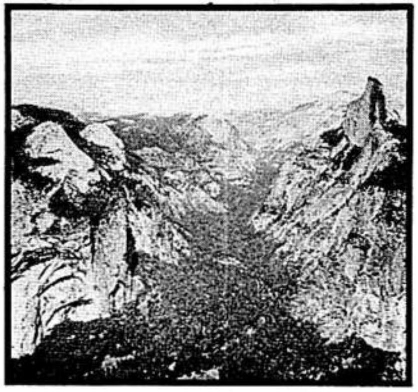
World Log: MERIMEE

System Data	
System Name:	Teile
Map Coordinates	(10.0S 6.7E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	1
Gravity:	1.4 G
Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	710,000,000 sq. km
Percent Land Mass:	77%
Total Land Area:	550,000,000 sq. km
Surface Conditions	
Length of Day:	28 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	16%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	10%
Cultural Data	
Technological/Sociopolitical Index:	999992-97
Planetary Trade Profile:	FDEEEFG/B (D)

Merimee is a mining world. Although several metals are found in relative abundance, the major product is a special mineral called Zathium. Zathium is used as shielding material for high energy weapons, such as lasers and phasers. As Merimee is virtually covered with mountains, there is little agriculture.

The planet Merimee is owned by the Merimee Mining Corporation, and all governmental functions are carried out by the corporate office. The corporation is technically chartered by the Federation, but Merimee is considered an independent planet. Because of their close proximity with the Romulan-controlled area, MMC trades as much with the Romulans as it does with the Federation and independents such as Baker's Dozen. The Federation does not know that MMC sells Zathium to the Romulans, and Borrdinn does not intend to tell them.

Surface security is handled by MMC Security. Although rules are few, infractions are dealt with severely. System patrol is non-existent, which leads to occasional problems with privateers. Traders are routinely warned of the possibility.



World Log: NEW PARADISE

System Data	
System Name:	Sanomar
Map Coordinates	(11.0S 6.3E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	1
Gravity:	1G
Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	510,000,000 sq. km
Percent Land Mass:	76%
Total Land Area:	387,600,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	37
Radioactives:	26
Gemstones:	Trace
Industrial Crystals:	8
Special Minerals:	9
Cultural Data	
Technological/Sociopolitical Index:	999763-98
Planetary Trade Profile:	CCCDDEF/B (D)

New Paradise is one of the older Federation colonies. Once established and reasonably self-sufficient, they declared their independence from the Federation. To this day, they remain independent, trading with anyone and everyone. One of their early aims was the establishment of a classless society. Like similar attempts by others before them, they failed to achieve this ideal.

New Paradise maintains a small military, both ground and space. Their space defense force consists of eleven small, scout-type vessels that are definitely no match for any serious invasion force. New Paradise relies on its location between the Romulans and the Klingons to maintain their independence now, maintaining trade agreements with both. Both powers also maintain embassies on-planet.

Tariffs on New Paradise are either very low or non-existent, especially on high-tech items. The Lenfft Corporation, producers of various types of power generators and heavy-duty batteries, has its headquarters on the planet. Their products comprise a major percentage of the planet's exports. The black market does a large amount of trade in radioactives, which are plentiful here. The planet's small cache of dilithium is also a black market item.

After the failure to establish a classless society, the leaders of New Paradise established one of the better-running examples of a two-house democratic government. There are currently no political parties on the planet, with every in habitant of legal age voting on all major issues.

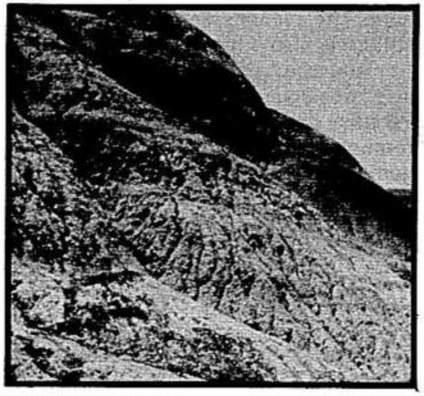
World Log: NEW SAHARA

System Data	
System Name:	Oeth
Map Coordinates	(10.1S 6.3E)
Number of Class M Present:	2
Planetary Data	
Position in System:	II
Number of Satellites:	1
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	410,000,000 sq. km
Percent Land Mass:	86%
Total Land Area:	350,000,000 sq. km
Surface Conditions	
Length of Day:	19 hours
Atmospheric Density:	Terrestrial
General Climate:	Desert
Mineral Content	
Normal Metals:	8%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-97
Planetary Trade Profile:	FFFEEFG B (C)

New Sahara is one of the two marginally-habitable planets in the Oeth system (*see also* New Siberia). It is a desert world, an airless ball of rock. The climate is hot and dry, and what little water there is exists in the two polar oceans. The planet's small mining population is also centered around the poles.

A compound found in the sand of New Sahara is the single reason people live here at all. Called Hard Sand, the compound can be treated to make one of the strongest high-temperature ceramics to be found anywhere in the galaxy. Hard Sand ceramic is used in the construction of some starship engines, as well as some internal combustion style engines. Almost everything else must be imported, including some water from New Siberia.

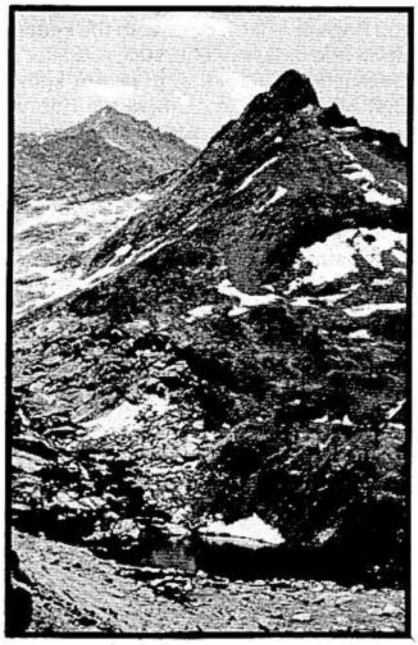
The governments of New Sahara and New Siberia are shared. One elected leader, the Grandmaster, is elected every five years by both planet populations. Also elected are a 60-member Grand Senate, with 30 members chosen from each planet. The two Oeth planets consider themselves independent, with no real alignments with any major government.



World Log: NEW SIBERIA

System Data	
System Name:	Oeth
Map Coordinates	(10.1S 6.3E)
Number of Class M Present:	2
Planetary Data	
Position in System:	IV
Number of Satellites:	0
Gravity:	.6 G
Size	
Diameter:	7800 km
Equatorial Circumference:	24,000 km
Total Surface Area:	310,000,000 sq. km
Percent Land Mass:	40%
Total Land Area:	120,000,000 sq. km
Surface Conditions	
Length of Day:	28 hours
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	18%
Radioactives:	20%
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-97
Planetary Trade Profile:	FBCDDFG B (B)

New Siberia is one of two inhabited planets in the Oeth system (*see* New Sahara). It is an arctic, snow-covered planet, with a somewhat larger population than does New Sahara. Major cities are located in the equatorial regions, but also some smaller cities and towns situated closer to the poles. There are small mining operations for both metals and radioactives, which New Siberia exports off-planet buyers, including its sister planet, New Sahara. Water, in the form of ice, is also exported to New Sahara.



World Log: NEWLIN III

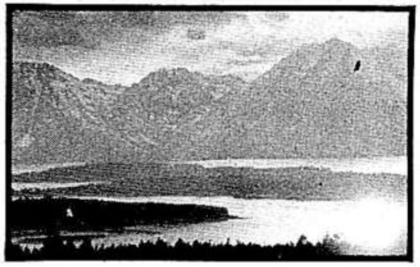
System Data	
System Name:	Newlin
Map Coordinates	(8.3S 6.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	2
Gravity:	.8 G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	410,000,000 sq. km
Percent Land Mass:	56%
Total Land Area:	230,000,000 sq. km
Surface Conditions	
Length of Day:	21 hours
Atmospheric Density:	Terrestrial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	33%
Radioactives:	24%
Gemstones:	14%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-96
Planetary Trade Profile:	CDCDCDF B (B)

Newlin III is a volcanic planet with a fairly sulfurous atmosphere. Because of its volcanic nature, Newlin has a high metal and radioactive content. Many important ores are found on Newlin's surface, and mining colonies have been set up on both moons, as well as on three of her sister planets.The ores and certain processed and finished products are exported to neighboring systems.

Because the atmosphere is somewhat corrosive, many manufactured items wear out within only a few years time. For that reason, Newlin must import almost everything it needs. The black market is said to be quite healthy on Newlin.

The government of Newlin is a controlled monarchy. Although six-year-old Queen Bethlin IV is nominally in charge, it is her guardian, the Prime Minister, who wields the real power. He oversees the Newlin Ministry, whose members are elected every two years.

Newlin III is considered an independent world, but leans slightly toward the Federation. There is a large police force for planetary security, as well as a force of about twelve in-system patrol boats. There is also a security base on the fourth planet, which serves as an entry post to the system. It is known as Security Base One, and all incoming ships must stop there, before being allowed to proceed to Newlin III.



World Log: OVERLINN

System Data	
System Name:	Wuurth
Map Coordinates	(10.2S 6.6E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq. km
Percent Land Mass:	48%
Total Land Area:	320,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Thin
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	23%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-93
Planetary Trade Profile:	ACEDBDF/D (C)

Overlinn is a very rich agricultural planet. Almost any type of crop thrives here, from grains and fruits to grazing animals and fish. Although Overlinn's air is very thin, most of the species have adapted to the new conditions very well.

Overlinn was settled by a large group of native Americans, who still adhere to the millenia-old tribal forms and customs of their ancestors. There are many tribes on Overlinn, each with its own chief. The chief, in turn, represents his group in the tribal council, which is led by Headman John Strongstone. There are some factions rivalling for leadership, but none are yet strong enough to challenge Strongstone.

There are no ships on Overlinn, and so most trading of imports and exports is done through the traders of Remfry. As the people of Overlinn will condone no illegal goods on their planet, Overlinn has no black market.

World Log: PASSARRA'S DREAM

System Data	
System Name:	Jonnat
Map Coordinates	(11.5S 7.2E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	1
Gravity:	.8G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	408,000,000 sq. km
Percent Land Mass:	56%
Total Land Area:	228,480,000 sq. km
Surface Conditions	
Length of Day:	21 hours
Atmospheric Density:	Terrestial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	8
Radioactives:	Trace
Gemstones:	14
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999875-98
Planetary Trade Profile:	BEEDEFF/D (X)

Passarra's Dream is a scientific research station, currently inhabited by only 130 colonists. The planet is independent, even though most of its scientists are Federation-supported. The colony itself is an experiment in sociology by Dr. Vaughn Passarra, whose goal is to build a scientific community free of cultural prejudices. He has invited scientists from the Klingon and Romulan governments, as well as anyone else wishing to settle. Passarra is also attempting to build a self-sustaining colony, and so immigration is controlled. There are fewer restrictions on the number of scientists allowed to immigrate, but each scientist settling here requires roughly 3.2 other colonists to support him.

Trade is brisk on Passara, the colony's exports consisting of knowledge, patents, and licensing rights. The planet must import items that cannot yet be produced on-planet, such as scientific equipment and power generators. Tariffs are non-existent, with some items, such as firearms, simply not allowed. The black market naturally thrives on Passarra's Dream.

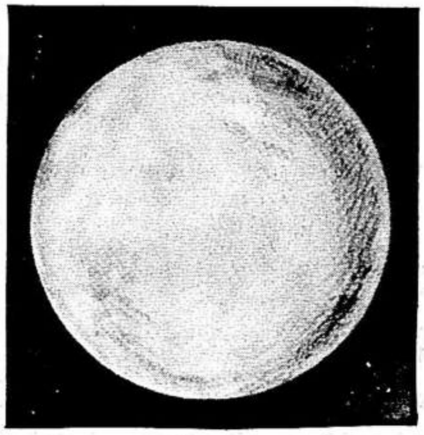
The original settlers included the administrative group that currently governs the colony. Within five years, however, a normal participatory government will be established. Passara has made the normal non-expansion agreements with the three major powers, as well as special agreements assuring the planet's neutrality.

World Log: REMFRY

System Data	
System Name:	Zoeller
Map Coordinates	(10.4S 6.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IX
Number of Satellites:	2
Gravity:	1.2 G
Size	
Diameter:	15,600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	610,000,000 sq. km
Percent Land Mass:	86%
Total Land Area:	520,000,000 sq. km
Surface Conditions	
Length of Day:	19 hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	3%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999995-9
Planetary Trade Profile:	DDDDDDD C (C)

Remfry is a tradeworld located centrally between the Klingon- and Romulan-controlled areas. Although endowed with very few natural resources, the planet does very well trading with many of its neighbors. There are no tariffs on Remfry, but the knowledgeable trader should expect to pay his share of "bribes and squeeze." Being close to both the Klingon and Romulan borders, there is a healthy black market trade in their goods.

The government on Remfry consists of the Amalgamated Traders Association, and ATA President Dilger Hess could be considered the nominal planetary leader. The Association elects its own leader on an irregular schedule, although Hess has been in charge for two years. The ATA also keeps ten in-system boats as patrol craft, patrolling the system near Remfry and her two moons.



World Log: ROCKHAVEN

System Data	
System Name:	Lomann
Map Coordinates	(10.0S 5.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	1
Gravity:	1.2 G
Size	
Diameter:	15,600 km
Equatorial Circumference:	48,000 km
Total Surface Area:	610,000,000 sq. km
Percent Land Mass:	65%
Total Land Area:	400,000,000 sq. km
Surface Conditions	
Length of Day:	20 hours
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	17%
Radioactives:	19%
Gemstones:	5%
Industrial Crystals:	Trace
Special Minerals:	13%
Cultural Data	
Technological/Sociopolitical Index:	999990-97
Planetary Trade Profile:	FAAEDEG A (C)

Rockhaven is a cool, barren planet. Its mountain- and cliff-covered surface is somewhat hostile, but the planet is very rich in ores and minerals. Perhaps the most valuable special mineral mined here is Timliite, which is used in the processing of certain hydrocarbons, including Tri-ox. Imports include foodstuffs, most medium and high-tech items, and luxury goods.

The population is moderately large, and the government is representative. All members of the parliament are elected, on a rotating basis, every five years. The president is also elected every five years. Rockhaven tends to be friendly with most of the independent planets and Baker's Dozen, but Rockhaveners very much dislike the Klingons.

World Log: SATTERFELD

System Data	
System Name:	Satter
Map Coordinates	(8.8S 6.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	0
Gravity:	1.4 G
Size	
Diameter:	18,000 km
Equatorial Circumference:	56,000 km
Total Surface Area:	714,000,000 sq. km
Percent Land Mass:	93%
Total Land Area:	664,000,000 sq. km
Surface Conditions	
Length of Day:	24 hours
Atmospheric Density:	Terrestrial
General Climate:	Desert
Mineral Content	
Normal Metals:	25 %
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	99999A-91
Planetary Trade Profile:	HAFGDEG C (D)

Satterfeld is a mining world, exporting both raw ores and refined metals. There is no real government, only groupings of families. For example, each family owns and operates its mines near a family-owned water hole, as there is very little water on Satterfeld. Just as there is no formal government, thus there is really no military, other than that maintained by the individual households. Satterfelders have no real leanings toward any offworld group, preferring to remain fairly isolated. Different families may prefer dealing with one major government or another, but each case is completely individual.

There is one good spaceport, owned by the Plicart family and used by most major holders. Most off-planet trading is conducted by the several more powerful families. The smaller holdings usually deal with the larger families. Major imports include food, water, and other basic comforts. Satterfelders tend to be a rather pragmatic people who generally disdain luxury items. There is no black market on Satterfeld because everything is available openly.

As might be expected, laws are very loose on Satterfeld. In fact, very little is actually outlawed. Pirates may be found in remote locations, but they have to bring in all their supplies. Satterfelders ignore pirate enclaves, as long as their precious natural resources are not used or damaged.

World Log: SCHNEITER

System Data	
System Name:	Valanda
Map Coordinates	(8.4S 6.5E)
Number of Class M Present:	1
Planetary Data	
Position in System:	V
Number of Satellites:	0
Gravity:	.9 G
Size	
Diameter:	11,700 km
Equatorial Circumference:	36,000 km
Total Surface Area:	460,000,000 sq. km
Percent Land Mass:	99%
Total Land Area:	455,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	41%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	Corporate Mining Colony
Planetary Trade Profile:	AAAAAAA A (X)

Schneiter is a very cold world, most of it covered by a thin crust of ice and snow. This crust is generally from 50 to 1,000 feet thick in spots. In the thinner areas, the miners of the Schneiter Mining Corporation have driven vertical shafts into the frozen soil below; spreading out from these, horizontal tunnels have been carved in all directions. The shafts are protected aboveground by massive, covered, solar-ray sheds. Below ground, the newer tunnels are still productive, while the older, played-out tunnels have been expanded into living quarters for the miners. The Schneiter mines yield many useful metal ores, including iron, aluminum, magnesium, cobalt, and many others.

There is no government on Schneiter; all major decisions are made at corporate headquarters on Comstock. The man in charge is Mine Superintendent Gavin O'Reilly. All ore shipments are collected in the sheds above ground and shipped to Comstock for sale and distribution. All equipment and supplies are provided by the corporation. Only luxury items are imported, although traders may be hired to bring in shipments of equipment and supplies to Schneiter, and ore back to Comstock.

World Log: TAKANARRA II

System Data	
System Name:	Takanarra
Map Coordinates	(10.6S 6.4E)
Number of Class M Present:	1
Planetary Data	
Position in System:	II
Number of Satellites:	3
Gravity:	1.4G
Size	
Diameter:	18,200 km
Equatorial Circumference:	56,000 km
Total Surface Area:	714,000,000 sq. km
Percent Land Mass:	40%
Total Land Area:	285,600,000 sq. km
Surface Conditions	
Length of Day:	19 hours
Atmospheric Density:	Terrestial
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	49
Radioactives:	Trace
Gemstones:	16
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	998764-77
Planetary Trade Profile:	DBGDBEF/B (E)

Settled by Terrans seeking isolation from the rest of Humanity, Takanarra's isolation ended abruptly when the Klingons sent landing parties to examine the planet. Takanarra has no valuable minerals to speak of, and the planet is not suited for growing much beyond what foodstuffs are needed. This lackluster quality is exactly what drew the original colonists here and what keeps them from being bothered much by outsiders. Takanarra has no military force to speak of. They have a few, small, scout-type vessels built from converted transports. They have kept technology very much at the levels they were familiar with when they left Earth.

Trade is not a major occupation on Takanarra. There are a few merchants who sideline in off-world trade, but none who specialize. Lodeston is the largest merchant on the planet, and he will trade with offworlders if they have something of interest. Takanarran's are greatly interested in high-tech items, and these are their major imports, particularly various power generators. Because of the planet's isolationism, there is a large black market on Takanarra. Although it can be difficult to locate a black marketeer, once found, the high tariffs on incoming goods can be avoided.

Although an independent planet, Takanarra still has strong ties to the Federation. There is a continual, if infrequent, flow of information between the two. The Isolationist Party, which, controls the two-party democracy, is torn between total isolation and these Federation ties. Upon close examination, it will be found that many of the Party leaders are also either black marketeers or the principal backers of the black marketeers.

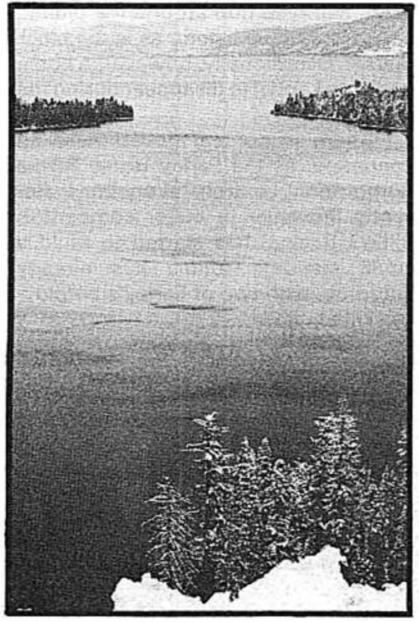
World Log: TANNINE

System Data	
System Name:	Hammaker
Map Coordinates	(9.2S 6.9E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VI
Number of Satellites:	2
Gravity:	1 G
Size	
Diameter:	13,000 km
Equatorial Circumference:	40,000 km
Total Surface Area:	510,000,000 sq. km
Percent Land Mass:	90%
Total Land Area:	460,000,000 sq. km
Surface Conditions	
Length of Day:	30 hours
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	Trace
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	112220-21
Planetary Trade Profile:	Will not trade with off-worlders

From space, Tannine looks like no more than a white ball with a blue stripe around the middle. This blue band is Tannine's only liquid water, the Equatorial Ocean. Along the ocean, there is a narrow strip of tillable soil. The rest of the planet is covered by a thick sheet of ice that stretches across both poles. This cold world has no redeeming qualities.

Tanninite civilization exists in the form of a human colony that decided to revert to primitive life. They have given up all technology to "live off the land." The Tanninites do know about space travel, but they will not trade with anyone because they regard technology with disgust.

Government on Tannine is pre-tribal. The people live in large family groups, which they rarely leave. There is no governmental leader.



World Log: THISISIT

System Data	
System Name:	Sinnaway
Map Coordinates	(11.3S 6.7E)
Number of Class M Present:	1
Planetary Data	
Position in System:	VI
Number of Satellites:	1
Gravity:	1.1G
Size	
Diameter:	14,300 km
Equatorial Circumference:	44,000 km
Total Surface Area:	561,000,000 sq. km
Percent Land Mass:	87%
Total Land Area:	488,070,000 sq. km
Surface Conditions	
Length of Day:	27 hours
Atmospheric Density:	Terrestial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	47
Radioactives:	26
Gemstones:	6
Industrial Crystals:8	
Special Minerals:	9
Cultural Data	
Technological/Sociopolitical Index:	998653-98
Planetary Trade Profile:	CBCEDEF-B (C)

Thisisit was discovered many years ago by Simone DeLeone, an explorer for the UFP. He had been searching for an above-average Class M planet for colonization by his employers, the Hathaway Foundation. Since they paid higher prices for better-suited planets, Simone had been dreaming of discovering one that would make him rich enough to retire. When he read the sensor readings on the unknown planet, he exclaimed "Thisisit!!" and decreed that would be its name. Since he had the authority to do so, and no one could come up with a good reason not to name the planet Thisisit, the name was adopted.

Thisisit has maintained relations with the Federation, especially since the war with the Klingons, but is fiercely independent. The government has gone so far as to throw the Federation ambassador off-planet for three months when the ambassador demanded the government stop trading with the Klingons and the Romulans.

Trade on Thisisit is open to all interested parties. Tariffs are low in order to encourage trade and to keep the technology level of the planet high. The black market still thrives, however, because of the location of the world's location. The market here is used by the Mantiev Colonial Association (both sides) to acquire items from Federation sources.

The highly democratic government of Thisisit is undergoing some extensive changes due to the large, recent influx of immigrants. Voting is now restricted to those residents who can prove residency of at least five years.

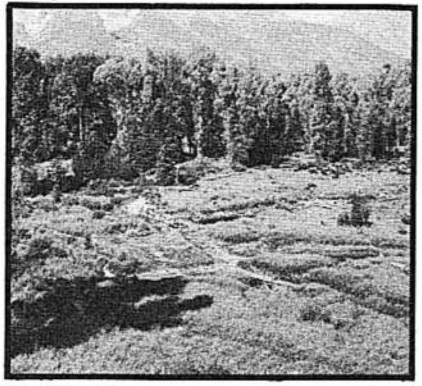
World Log: TURNINGPOINT

System Data	
System Name:	Nachheis
Map Coordinates	(9.6S 6.7E)
Number of Class M Present:	1
Planetary Data	
Position in System:	III
Number of Satellites:	0
Gravity:	1.3 G
Size	
Diameter:	16,900 km
Equatorial Circumference:	52,000 km
Total Surface Area:	660,000,000 sq. km
Percent Land Mass:	48%
Total Land Area:	320,000,000 sq. km
Surface Conditions	
Length of Day:	26 hours
Atmospheric Density:	Terrestrial
General Climate:	Warm Temperate
Mineral Content	
Normal Metals:	23%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	999994-98
Planetary Trade Profile:	AEEDDEE/A (C)

Turningpoint is a large, grassy planet, set squarely between Baker's Dozen and the Romulan sphere, and these two powers each use Turningpoint as a buffer zone between themselves. Neither side will try to annex the planet or allow it to be annexed by the other. Needless to say, this state of affairs pleases the Turners greatly.

Turningpoint is considered agricultural, producing some of the finest beef cattle in this portion of the galaxy. The beef is shipped both to the Romulans and to Baker's Dozen, which simply reinforces the buffer zone. Equipment and luxuries must be imported, as well as raw materials and radioactives.

Government on Turningpoint is basically participatory. The population inhabits a few major cities and hundreds of thousands of family ranches. All families have a say in major government decisions, but all off-world dealings are carried out through the City Clans. These are families who prefer to run the large cities rather than the ranches. Primary among these is the clan of Roderigo G. Lopez, who runs Lopez City, the largest and wealthiest city on Turningpoint.



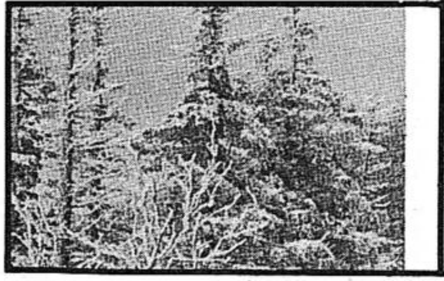
World Log: ZANNADUU IV

System Data	
System Name:	Zannaduu
Map Coordinates	(11.5S 6.8E)
Number of Class M Present:	1
Planetary Data	
Position in System:	IV
Number of Satellites:	0
Gravity:	.8G
Size	
Diameter:	10,400 km
Equatorial Circumference:	32,000 km
Total Surface Area:	408,000,000 sq. km
Percent Land Mass:	85%
Total Land Area:	346,800,000 sq. km
Surface Conditions	
Length of Day:	24 hours
Atmospheric Density:	Terrestial
General Climate:	Arctic
Mineral Content	
Normal Metals:	26
Radioactives:	22
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Technological/Sociopolitical Index:	888664-98
Planetary Trade Profile:	FDEEFFF/D (X)

Zannaduu is a desolate snow- and ice-covered planet except for the equatorial zone. Here the snow gives way to lush valleys and plains. In these plains are raised some of the fastest race horses in the galaxy. The snow and ice have given Zannaduu its freedom simply because the planet has nothing to offer a conqueror except its barrenness. Located near the Klingon sphere of influence, the planet has been visited by the Klingons several times. Although the Klingons consider the planet theirs, so far they have not bothered to set up any type of base.

The only real export has been the horses, while almost all other needs must be imported. Food can be grown to support the colony, but most medical supplies are brought in. The planet has fallen behind in technology, maintaining only two sub-light vessels that are used mainly to hop around the planet. Tariffs are non-existent, as is the black market. Occasionally, however, a horse has been known to disappear during the night.

There is no real government on Zannaduu, as the Farley Horse Farms Corporation controls everything. Recently, however, a major competitor, Billie's Racing, has started to build a small station. Trouble has already flared up, with two of Farley's employees killed.



DIVERSITY OF CULTURES

JORIDIAN

KAFERIAN

CYGNIAN

To my knowledge, FASA never released the Joridian, Cygnians or Kaferians despite referring to them in text and drawings.

CAITIAN

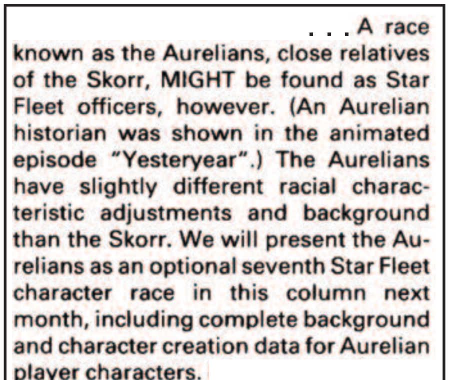
EDOAN

ANDORIAN

TELLARITE

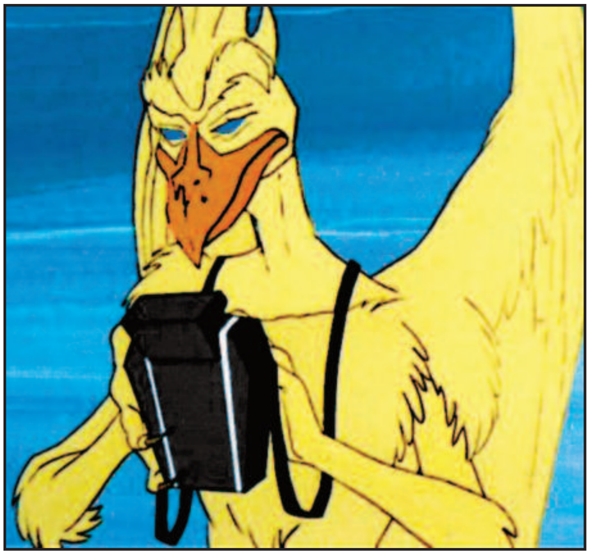
Stardate Magazine #4/5 published this notice here...

BUT the Aurelians **never** published. The files may still exist. When asked on Twitter, the article's author, Guy McLimore Jr., related that he knew of no such material. Did Editor Dale Kemper add this note to the article last minute? A loss to the game's history. What happened?

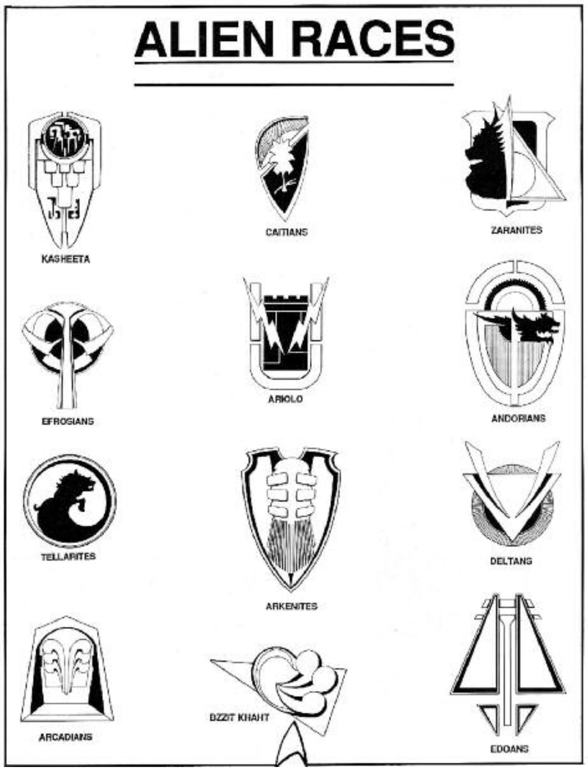


. . . A race known as the Aurelians, close relatives of the Skorr, MIGHT be found as Star Fleet officers, however. (An Aurelian historian was shown in the animated episode "Yesteryear".) The Aurelians have slightly different racial characteristic adjustments and background than the Skorr. We will present the Aurelians as an optional seventh Star Fleet character race in this column next month, including complete background and character creation data for Aurelian player characters.

p21, Jan/Feb 1985



Tricorder readings anyone?



Apply the following dice modifiers to your choice of career path in
BOOK 1, LIFEFORM READINGS

Roll	Species	STR	END	INT	DEX	CHA	COOL	LUC	PSI
1	Alpha Centauran							-20	-10
2	Arcadian	-15	-05	+10	+25water -10land		-10	-10	-30
3	Ariolon	+10	+10		-20	-10	-10	-05	d%/10rd
4	Arkenite	-10	-10	+10		-20	-20	-05	-10
5	Bzzt-Khaht	+10	+10		-10	-15		-30	-40
6	Deltan			+20		+30		-20	
7	Efrosian	+15	+15	+05		+05		-05	-05
8	Kasheeta	+10			-20	+10	-15	-10	-40
9	Xelatian	-10	-15		+15	+05	-20	-20	-10
0	Zaranite	+05			-05	-10		-25	-30

Attribute Modifiers were never given for the Dayan, so they are not listed above.
See the Mixed Blood and TAS Entries for their specific modifiers.

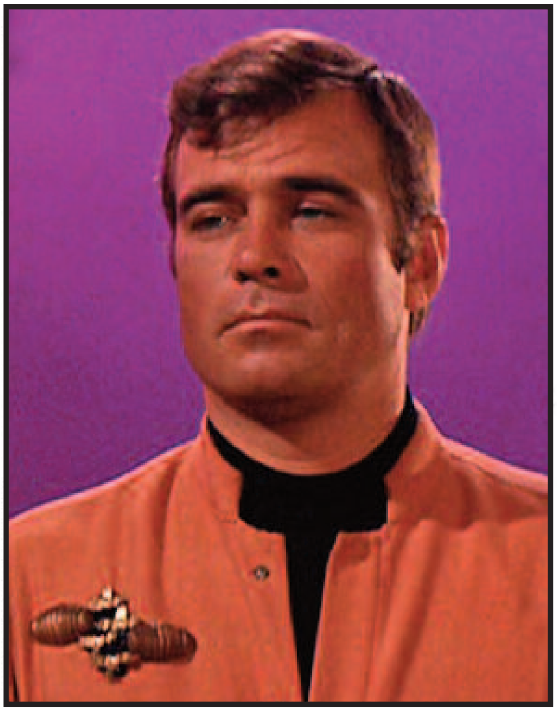
Member Species seen in later movies and venues may have been members during TOS, simply never seen. Therefore they are presented here as optional to your campaign.

When designing alternate humans, simply modify a few points up or down on some Attributes, but always penalize LUC and PSI the most. No one is as lucky as standard humans. And 'standard humans' are not all necessarily descended from Earth. Purple humans can be standard, just purple. But purple people could also be a vanrant human with Attribute modifiers or special senses or some such. Consult with your GM.

ALPHA CENTAURANS

World Log: ALPHA CENTAURI

System Data	
System Name:	Al Rijil
Map Coordinates:	1.27N 2.92W
Number of Class M Present:	3
Planetary Data	
Position In System:	VII
Number Of Satellites:	2
Planetary Gravity:	.86g
Planetary Size	
Diameter:	18,000 km
Equitorial Circumference:	56,500 km
Total Surface Area:	1,017,876,000 sq km
Percent Land Mass:	30%
Total Land Area:	305,363,000 sq km
Planetary Conditions	
Length Of Day:	25 hrs
Atmospheric Density:	Terrestrial
General Climate:	Tropical
Mineral Content	
Normal Metals:	60%
Radioactives:	10%
Gemstones:	10%
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Alpha Centauran
Technological/ Sociopolitical Index:	999998-98
Planetary Trade Profile:	AABAABB/A(B)



PLANETARY DESCRIPTION

Al Rijil is a triple system containing two yellow stars and a red dwarf star. The fourth, fifth, and seventh planet of the system support life. The first two are colonies of Alpha Centauri proper.

Alpha Centauri is a lush tropical world that supports a population of 20 billion inhabitants, and ranks as one of the major cultural and scientific centers in the Federation, second only to Terra.

Visitors to the planet will be inspired by the Cochrane Memorial, the Star Fleet Academy, and the Federation Historical Institute. In addition, this world is known for its huge expanses of unspoiled wilderness, rivalling even the famed Benecian outback.

RACIAL DESCRIPTION

It is theorized that Alpha Centaurans are Humans transplanted from Terra's Mediterranean basin in the fifth century B.C. (Earth standard date) by the Preservers. They have coarse dark hair, swarthy complexions, and are generally slightly larger than the average human.

Alpha Centauran ideals are a cross between Emersonian transcendentalism and animistic concepts. From birth, every member of the race learns the *Shk-Te Arar*, a martial philosophy based on the beliefs that all beings are equal, that moderation should prevail even in circumstances of abundance, and that all things possess a living spirit that is part of a greater whole.

The Alpha Centauran concept of equality came about during the slave uprisings that occured early in the planet's history. The belief in moderation developed during an early period of warfare between the Alpha Centauran city-states. The last concept stems from the days after the massacre at the nature commune.

Alpha Centaurans are conservative and disciplined. They are also aggressive, but not violently so; their philosophy encourages moral superiority over physical force. Nevertheless, Alpha Centaurans love physical sports, especially endurance tests or contests of skill. Some of the best long-distance runners in the Federation are Alpha Centauran. Their sunjamming races, which are steeped in martial philosophy, are almost a religious event among the people.

Alpha Centaurans are the most democratic race in all the Federation. They are so democratic, in fact, that they feel superior to other races who only "feign to have the proper moral and social obligations to others". Because of this attitude, most other races label Alpha Centaurans as snobs.

Alpha Centaurans believe that an order underlies the universe, no matter how chaotic or confused it might seem, and that each thing has its place—an idea now held mainly by only primitive cultures. In this regard, Alpha Centaurans resemble Vulcans, another people who have held to basic religious and philosophic beliefs despite the passage of time.

Alpha Centauran society is classless: everyone is equal. There are, however, some leaders who deal with the Federation when needed, and others who administer internal affairs. Alpha Centaurans understand that not all people can make the proper judgments and decisions needed to run a planet, and thus it is logical to appoint those individuals who are qualified.

Alpha Centauran government is run by three elected officials. Everyone on the planet participates in the voting, which is accomplished through an interactive televison network. Voting is one of the most important duties of the planet's citizens, because it shows that they still follow the correct social and moral philosophy. Like sunjamming, voting is considered a religious event.

Another interesting facet of Alpha Centauran life is a rite called the *Makel Re Talver*, or Time of Learning. When an Alpha Centauran child turns 13, he or she may wander about the planet, seeking truth and understanding. During this time, Alpha Centaurans feed and shelter these children, no matter who they are or from where they come. In effect, whatever the seekers want or need is free. Though most other races would take liberties with such a privilege, Alpha Centauran philosophy prohibits the children from abusing it. The children leave the Time of Learning after five years, at which time they must choose their vocation and enter apprenticeship.

Alpha Centaurans only resort to physical violence if insulted. The insult they consider most unforgivable is to shake hands. Hand-grasping was the ancient Centauran way to begin arm wrestling. By shaking a modern Alpha Centauran's hand, the other person is saying that he thinks so little of the Centauran that he can defeat him in unarmed combat.

Most races find the Alpha Centauran philosophy contradictory. Alpha Centaurans rationalize the discrepancies by saying that one has to be born among them to understand.

RACIAL HISTORY

As there are no written records of Centauran history from before 2,500 years ago, many scholars believe that the Centaurans are an offshoot of the Human race, perhaps seeded on Alpha Centauri by the Preservers. Most Centaurans flatly deny this theory, and some speculate that Humans are, in fact, descended from Centaurans and were transplanted from Alpha Centauri.

Prehistoric legend on Alpha Centauri states that their gods led the Centaurans on a great migration from their rocky, inhospitable homeland to a lush green valley. The entire race was awed by this new land and named it Quiberon Prime. This settlement became the dominant city of the culturally homogenous city-states that sprung up on the world. Though each city was self-governing, a senate of representatives from each city-state convened at Quiberon Prime to decide issues of world-wide importance. As there was plenty of food and land available, there was little strife among the cities.

Eventually, the Centaurans became puzzled by the absence of the gods, and some openly questioned their existence. A small group of philosophers began circulating manuscripts espousing their views on transcendentalism, and soon Centauran society became divided between the pantheists and the transcendentalists. When the Senate outlawed the teachings of transcendentalism and imprisoned the leaders of the movement, riots broke out. For the first time in Centauran history, each city-state established an army to coerce the others to adopt their beliefs. As the battle lines were drawn, rougly equal numbers of the city-states supported each cause. The Senate disbanded, and the pantheistic cities began to invade territories of the enemy cities. However, the outcome of these wars was indecisive, and the city-states settled into an uneasy cease-fire.

About a century later, the pantheistic city-states were deteriorating from internal strife and civil disorder. Finally, a massive slave revolt toppled them. (The other city-states, true to their beliefs, held no slaves.) The transcendentalists restored order to the devastated pantheistic city-states and reestablished the Senate.

As transcendental belief coalesced, the adolescents began to make journeys of *Makel-Re Talvor*. A few of them refused to enter into any apprenticeship upon their 18th birthdays and instead established a wilderness community for meditation and communion with nature. Eventually, the commune grew to a few hundred individuals.

Centuries passed, and the Centaurans developed artificial organs and synthetic fibers. However, their technology could not protect them from a comet that crashed on the planet, levelling one city-state and crippling three others. According to Senate proclamation, all were required to help the survivors of the cataclysm, but the Centaurans residing in the nature commune refused to participate. This created strife, and some other Centaurans raided the community, slaying the inhabitants and torching the compound. The vigilantes were subsequently imprisoned, and the transcendentalist philosophy expanded to include toleration of other lifestyles.

Alpha Centauri space exploration efforts were second only to those of the Vulcans and the Andorians. Utilizing the solar winds generated by their three suns, they launched space vessels and colonized two other worlds in their system. In Stardate 0/42, a Terran exploration ship entered the Al Rijil system and, much to their surprise, found the advanced civilization of the Centaurans. The Terrans received a warm welcome, however, and the two governments signed a peace accord 17 years later.

Centaurans boast that their civilization was the driving force behind the creation of the Federation. It was a Centauran who first proposed a political union between Alpha Centauri, Andor, Tellar, Terra, and Vulcan, and it was at Alpha Centauri that representatives from these planets first met to create such a government. In addition, the political treatise establishing the Alpha Centauri Concordium of Planets, consisting of Alpha Centauri, Icarus, and Proxima Centauri, served as the model for the Articles of the Federation.

PLACE IN THE FEDERATION

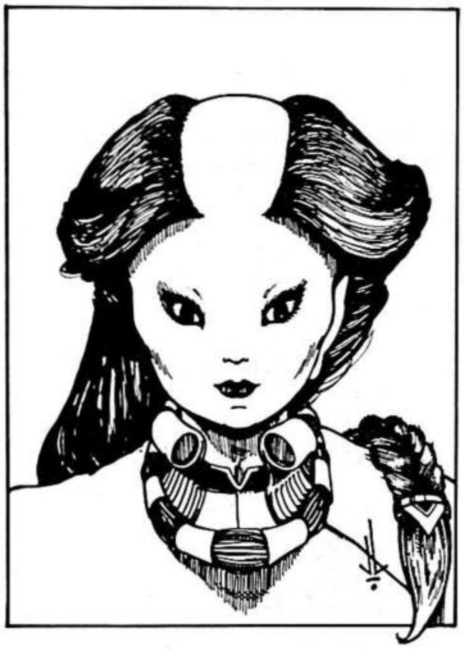
Centaurans are recognized as the force behind the Star Fleet Advocates Assembly. This powerful group lobbies to ensure that Star Fleet receives enough finances to cover operating expenses, new ship construction costs, and advanced weapons research. They have considerable influence with the Federation Council, but less with the Federation Assembly.

Centauran firms are usually at the forefront of Federation technology. Charlottes Shields, a Centauran firm located in Quiberon Prime, is a major designer and manufacturer of deflector shield systems. Cavanaugh Industrix of Telperion, Alpha Centauri, is the largest manufacturer of industrial robots in the Federation. In addition, Centauri Spaceworks produces the most cutters and is the only producer of monitors for Star Fleet Command.

Alpha Centaurans serve in many positions throughout Star Fleet and the Federation. Because of their views on racial equality, they are excellent diplomats who are able to deftly arbitrate negotiaions between other groups because of their ability to see both sides of a situation. This fairmindedness makes them excellent members of the judiciary as well.

ARCADIANS

World Log: ARCADIA	
System Data	
System Name:	Vellun Gamma
Map Coordinates:	8.21N, 0.59E
Number Of Class M Present:	1
Planetary Data	
Position In System:	5
Number Of Satellites:	2
Planetary Gravity:	0.78g
Planetary Size	
Diameter:	18,400 km
Equatorial Circumference:	55,000 km
Total Surface Area:	720,000,000 sq km
Percent Land Mass:	20%
Total Land Mass:	144,000,000 sq km
Planetary Conditions	
Length Of Day:	20 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	85%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	5%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Arcadian
Technological/ Sociopolitical Index:	555666-67
Planetary Trade Profile:	None



The two scores for dexterity refer to the average Arcadian's agility in water and on land.

PLANETARY DESCRIPTION

Arcadia is a mild, temperate world with a slightly higher oxygen content than that of Terra. Covered almost entirely by water, Arcadia is home to a species of intelligent aquatic mammalians known as the Arcadians. That portion of the planet not covered by water is comprised mostly of numerous islands and small archipelagos; two small continents lie near the southern pole. Most Arcadians reside in small cities built on the island chains. In addition, the Arcadians have constructed numerous artificial island masses that move about the planet with the changing of the seasons. Current estimates place Arcadian population at three to four billion inhabitants, though the possible presence of underwater communities makes accurate predicitions impossible at this time.

RACIAL DESCRIPTION

A sentient species resembling Terran dolphins, Arcadians are a race of omnivorous, pacifistic, and sea-going mammals that live off sea-borne plankton, though their physiological makeup permits them to photosynthesize a limited amount of sustenance as well. Grouped in loose social collections of several hundred to several thousand beings, most Arcadians live on land and in the planet's oceans. Evidence suggests a short life span, somewhere between four and six standard decades long. Their pacifistic nature and the lack of predators have allowed the Arcadians to develop the beginnings of a technological society based primarily on applied physics and mathematics.

The Arcadians' piercing, grey-blue eyes are usually covered by a thin membrane that offers added protection against the solar radiation filtering through the planet's thin atmosphere. Typical Arcadians range in height from just under a half-meter at birth to over two meters at full adulthood. Though comfortable with walking upright, Arcadians are equally at home in water, as evident from the silky smooth texture of their skin. Their supple exterior is thicker than typical humanoid skin and protects them from sudden temperature changes. This hide also contains a unique array of chemical compounds that permits an Arcadian to obtain nourishment through photosynthesis. Arcadian skin tones range from light blue to pale yellow.

In addition to various marine features, Arcadians likewise display distinct mammalian characteristics. In addition to being air-breathers, Arcadians are born alive, and for their first three to six months, live in their mothers marsupial-like pouch. Despite their relative helplessness at birth, however, Arcadian young adapt quite easily to both land and water environments.

The Arcadians lack the concepts of the individual or the family unit; the closest approximation is a notion of affiliation with an extended grouping (school) of like-pigmented creatures. All Arcadians seem to share the responsibility for the care and upbringing of their young. Though generally pacifistic, Arcadians have been known to react aggressively to any threat to one of their communal brood. They seem to be devoid of any societal distinctions. All share the work of whatever communal projects are being conducted. As one member of the group quits work, another immediately takes his place for a similar period of time, though how work periods are regulated is presently unknown.

Federation sociologists theorize that the Arcadians as a whole share of form of communal consciousness on a level as yet undetected by normal means. As proof, they cite the amazing speed at which Arcadians assimilate various Federation dialects into their own language without the need for standard translation aids. In addition, despite evidence of relatively advanced technology, the Arcadians have no written language and only a rudimentary oral tradition.

The Arcadians enjoy a unique absence of any outward form of government. The closest approximation to a ruling class appears to be a deference toward individuals with a rare form of dorsal spine, though whether this is due to tradition, political prerogatives, or some other convention is unknown.

RACIAL HISTORY

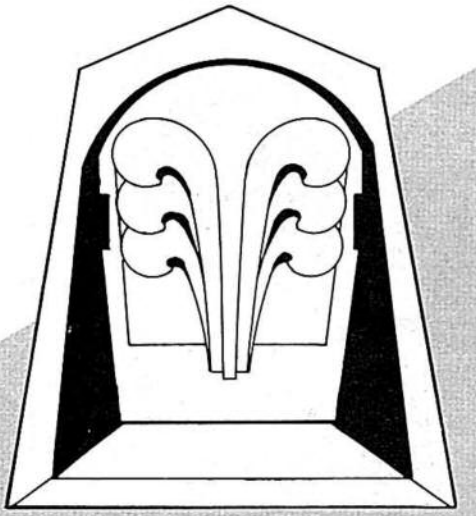
The origins of the Arcadian race remain somewhat puzzling even after six years of almost continuous contact with these sentient beings. Some elements of Arcadian society point to a long-established civilization, while other, equally valid factors suggest that the race became civilized only recently, within the last hundred years or so. Some scientists have postulated that the Arcadians are the remnants of a once-mighty civilization that broke off from their now-extinct parent race. Others believe that the Preservers transplanted the Arcadians from a distant, perhaps now-obliterated planet.

Arcadian culture is centered around mobile, ocean-based land masses similar to extended city-centers, which suggests a thriving technological society. This notwithstanding, Arcadians are remarkable for their almost total lack of elementary scientific understanding—with the exception of natural and applied physics. In this respect, the Arcadians rival and sometimes exceed accomplishments made by other more mature civilizations.

PLACE IN THE FEDERATION

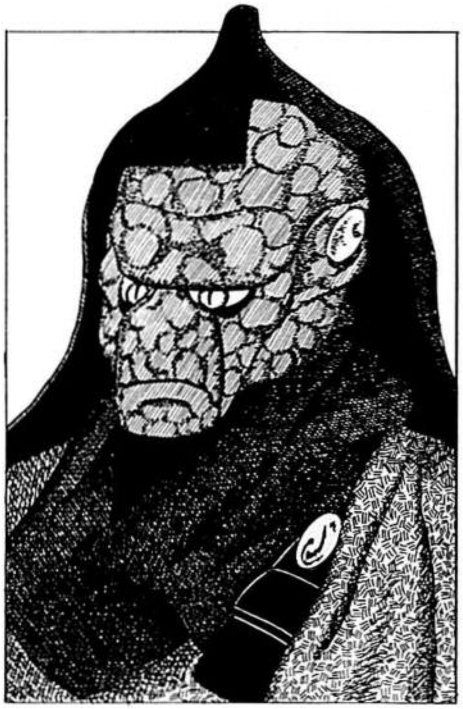
Though associate members of the Federation, the Arcadians have yet to express any desire to trade with other Federation worlds. At present, only a few Federation sociologists have been allowed on the planet since first contact eight standard years ago. The Arcadians apparently fear that influx of foreign races will cause radical upheaval in their society. For this reason, the Federation Council has placed a temporary contact/trade restriction on the Vellun Gamma system. Thus, although visiting Arcadia is allowed, all would-be tourists must have prior approval from Federation officials.

The Arcadians are credited with the first verifiable discovery of proto-matter, the first definable link between energy and matter. Though postulated mathematically for decades, actual proof of the existence of this material remained unproven until the Arcadian scientist Firim'Ja Ale experimentally detected proto-matter existing at a subatomic level in rare forms of antimatter. Initially touted as a potentially limitless energy resource, the basic instability of proto-matter (due to its antimatter properties) soon prompted the Federation Council to ban any manufacture or collection of proto-matter. Though naturally xenophobic to outsiders, the Arcadians have had to alter their isolationism due to Genesis Device publicity. That Dr. David Marcus used proto-matter in the Genesis matrix has catapulted the Arcadian race to public attention. It is hoped that such publicity will prompt the Arcadians to become full-status members of the Federation. Their delegates to the Assembly have been working overtime with Federation scientists to rectify the Genesis experiment disaster, for which they feel to be morally responsible.



THE ARIOLO

World Log: FILLANDIA	
System Data	
System Name:	Bartz' Star
Map Coordinates:	4.81N 4.86E
Number Of Class M Present:	1
Planetary Data	
Position In System:	I
Number Of Satellites:	0
Planetary Gravity:	.6g
Planetary Size	
Diameter:	26,000 km
Equatorial Circumference:	81,680 km
Total Surface Area:	2,123,716,600 sq km
Percent Land Mass:	72%
Total Land Area:	1,529,075,800 sq km
Planetary Conditions	
Length Of Day:	None
Atmospheric Density:	Thick
General Climate:	Tropical
Mineral Content	
Normal Metals:	29%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	Trace
Special Minerals:	2%
Cultural Data	
Dominant Life Form:	Ariolon
Technological/ Sociopolitical Index:	975774-55
Planetary Trade Profile:	GBDCECF/B (C)



PLANETARY DESCRIPTION

Fillandia is a large, extermely humid world dominated by tropical forests and extensive mountain ranges. Many find the planet's heat unbearable—planetary temperature is usually about 35° C. and has been known to reach 50° C. The dense cloud cover produces frequent electrical storms but little rain. Considered by planetologists to be one big continent with scattered seas and lakes, Fillandia is an extremely unstable world. High Richter-scale earthquakes occasionally ravage the planet, and the many volcanoes are frequently active. As if this were not enough, scientists have predicted that Fillandia's sun will explode in about a hundred years. Some bookies are actually taking bets on whether Fillandia or its star will self-destruct first.

Fillandia is one of those rare planets that does not rotate. One side always faces the sun, and the other remains in perpetual darkness. Furthermore, the planet has no axial tilt, and so the inhabitants do not experience any seasonal changes either. The planet circles its star once every 289.4 standard days.

RACIAL DESCRIPTION

The Ariolo are a race of sentient mammals resembling the centaurs of Terran mythology. They have six appendages: two arms, each with five fingers and an opposable thumb, and four cloven-hooved legs. The fine hair covering them from head to foot varies from mottled-gray to brown to black. Ariolo have no nasal opening; instead, they have highly developed taste buds on their tongues. Whenever they wish to determine weather patterns, smell flowers, or detect the presence of others, they merely stick out their tongues and taste the air. This sense is so acute that an Ariolon can differentiate between others by smell at one kilometer.

Ariolo have a rather slow metabolism. This is fortunate, because if it were any quicker, they would have to spend almost their entire lives eating to support their massive bulk (though many Ariolon would not mind this). Ariolon activity reflects this sluggish metabolism, and offworlders are quick to assume that the Ariolo are lazy and apathetic. However, though slow to react, they are dedicated workers and fierce fighters. When necessary, Ariolo can gallop at 60 kilometers per hour. The Ariolon's slow metabolism also gives him a life span of 150 standard years.

Ariolo eat a lot—they have to. Most of them weigh about 1,000 kilograms, and carrying around all that weight requires a great deal of energy. Since the establishment of the Ifelsi dynasty, the Ariolo have been vegetarians. The humid, tropical environment of Fillandia has given birth to over 10,000 different kinds of edible plants—herbs, fruits, vegetables, leaves, and so forth. Ariolo spend just as much time cooking as they do eating. As one might expect from their hyper-sensitive taste buds, they have very discriminating palates, and are very fussy about their food.

Ariolon society is hedonistic. They love to throw and attend *aferio*, or parties, reminiscent of Alpha Centauran *Kirva dentinor* or Terran *Roman orgies*. Pleasure is the central goal of individual Ariolo, and perhaps that is why they have not progressed very far culturally. The *aferio* allow Ariolo opportunities to sample the finest cuisine and listen to native music. With their six-digit hands, Ariolo are reputed to be the best musicians in the galaxy.

Of course, the Ariolo do not spend all their time at parties. They are diligent workers, and because of their strength and their planet's low gravity, they have built monumental structures. Unfortunately, Fillandia's frequent earthquakes have toppled most of the ancient buildings, but the ruins tell tales of gigantic, intricately carved temples and houses.

Fillandia is governed by the Farsighted One, a member of the Ifelsi family. The present ruler is a direct descendent of Yfrallo, the leader of the forces that overthrew the previous dynasty. The Farsighted One's word is law—anyone who forgets that will quickly find himself banished to the dark side of the planet. Just as an individual Ariolon pursues pleasure to attain self-fulfilment, the Farsighted One commands all Ariolo to fulfill the destiny of their race. Theoretically, this ruler is supposed to abstain from seeking pleasure himself so that he can spend all his time furthering Ariolon developmenrt. In practice, however this is rarely true.

Of all the races the Federation has contacted, the Ariolo are the only one that had not developed the concept of time. They have no natural method to measure time—no nights, no seasonal changes, and no satellites. Each individual decides when he will work, play, or sleep, based on the dictates of self-fulfilment. Ariolo consider death to be an end, but also believe that the individual will be continually reincarnated until he has achieved his highest state. 'The future' is a difficult concept for an Ariolon to grasp. If such a phrase could be applied to them, Ariolo would say they live one day at a time.

RACIAL HISTORY

Fillandia is a brutal world, where life evolved only with difficulty. When it did develop, however, the various species grew quickly as each tried to become dominant over the others. Eventually, the Ariolo won, and the other animal races soon died out.

Written records relate tales of gigantic monsters thundering across the planet and smiting the ground to bring forth the planet's blood. Early Ariolo cowered in the jungles for fear of the demons. Then they hit upon the idea of throwing some of their members into volcanoes as human sacrifice. According to Ariolon records, this seemed to stem the planet's flow of blood.

Some time later, an individual named Iroloro began preaching. His views on the seeking of pleasure to reach the highest stage of being stirred the Ariolo, and the race began to build cities and to discover their world and its scientific laws. However, many Ariolo disagreed with Iroloro's teachings, and took up arms against him. Olirofle, Iroloro's war chieftan, led his fanatical army against the unbelievers, and after many campaigns, beat them into submission. At this time, the entire planet was ruled by Iroloro.

When Iroloro died, disagreement broke out as to who would lead the Ariolo. Some (known as Ifelsli) believed that Iroloro's son Iflero should assume the kingship, while others (who were called the Olirri) supported the claim of Olirofle. The two factions fought for supremancy, but eventually, the Olirri won. Before the final battle, Iroloro's son Iflera entered the dark side of the planet and never returned. Ariolo mythology claimed that the dark side was the home of demons and the abode of the dead. Though none had ever returned from that dread place, Iflera proclaimed that one day he would come back.

Government under the Olirri was rather oppressive, but during their rule, technology increased manyfold. Roads, medicine, public housing, sanitation, and the culinary arts were developed. However, civil liberties were often violated, and the persecution of the Ifelsi continued. Needless to say, the Dynasty paid only lip service to the teachings of Iroloro.

Then, the Elarioh Saliwah, or the Great Dark Cataclysm of the Gods, occurred. Unusually intense earthquakes shattered some cities, and volcanoes poured fiery lava on others. Civilization was on the verge of ruin when the Ifelsi seized control of the cities. They reintroduced Iroloro's philosophy, which calmed the populace and strengthened them during this difficult time. Eventually, the cataclysms subsided, and the Ifelsi restored order and rebuilt their civilization. During their reign, the Ariolo invented high-stress alloys and plastics, capable of withstanding the planet's tremors.

PLACE IN THE FEDERATION

The Federation discovered the Ariolo in Stardate 1/7912. Since then, UFP engineers have taught them how to relieve their planet's internal stress and provided them with warp technology, which the Ariolo use to travel the stars seeking new pleasures.

Ariolo do not serve in Star Fleet military branches. Ships are too cramped for them, and the thought of automated food sickens them. Although they do work in administrative branches, most Ariolo serve the Federation as civil and chemical engineers, and, of course, as cooks.

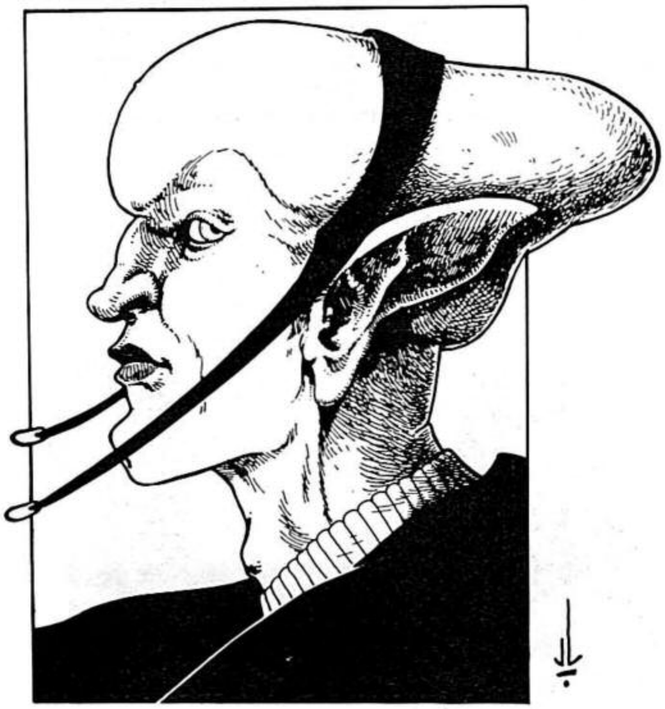
Upon learning of the impending destruction of their sun, the Ariolo have discovered the meaning of the word "hurry". They are currently petitioning the Federation Council to award them a new home planet.

The Ariolo's greatest gift to the Federation has been its music and musicians. It is worth enduring Fillandia's harsh climate to listen to a concert by the Fillandian Symphony Orchestra, especially as the concerts are more like festivals, with Ariolon and Federation delicacies served throughout the entire month-long extravaganza.

The Ariolo have also introduced a new form of music, the Warp Blues, that is currently sweeping the Federation. Sociologists call the meteoric success of this music "The Ariolon Invasion". Among the more popular groups are the Ahmels; and Orellia and the Urflo Hipsters.

ARKENITES

World Log: ARKEN II	
System Data	
System Name:	Arken
Map Coordinates:	4.77N 1.49E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	0
Planetary Gravity:	.7g
Planetary Size	
Diameter:	9,200 km
Equatorial Circumference:	28, 902 km
Total Surface Area:	265,900,000 sq km
Percent Land Mass:	47%
Total Land Area:	125,000,000 sq km
Planetary Conditions	
Length Of Day:	20 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	40%
Radioactives:	Trace
Gemstones:	Trace
Industrial Crystals:	17%
Special Minerals:	50%
Cultural Data	
Dominant Life Form:	Arkenite
Technological/ Sociopolitical Index:	988764-76
Planetary Trade Profile:	CDHFDEF/D (D)



PLANETARY DESCRIPTION

Arken II is a small, very dense world that orbits the two suns Arken A and B once every 200 standard days. The summer season hits swiftly, scorching the planet's surface but lasting only 20 days. Following this is the stormy fall season, lasting roughly 80 days. The winter season is extermely harsh, freezing the planet's seas for about 20 days. This is followed by spring, which, like fall, creeps in very slowly and lasts about 80 days. Surface temperatures at the planet's equator range from –25° C. to –10° C. in the wintertime, and from 20° C. to 50° C. in the summer.

Arken II is not native to the Arken system. Scientists believe that when its original star exploded, the planet was flung into interstellar space. Eventually, it drifted into the still-forming Arken system, where it was caught by the gravitational pull of the two young stars. The intense heart generated by these suns fused Arken II's sandy surface into a thick transparent crust. Eventually, underground rivers and lakes washed away much of the sand beneath these glass plains, and it was in these lakes that life formed.

RACIAL DESCRIPTION

The Arkenites are an aquatic race of Humanoids easily recognized by their hairless, bulbous heads and fin-like ears. They are very tall, averaging around 2.2 meters high, and their glassy, deep-set eyes vary from dark green to amber. Arkenites are weaker than Humans, but are as intelligent and lucky. Arkenites do not practice psionics, but a few psionically talented individuals are known to exist.

All Arkenites wear a special sensory aid on their heads, improving the individual's sense of balance and direction. Although they are necessary only when off Arken II, most Arkenites wear the device at all times because it enhances coordination, making the average Arkenite much more dexterous than most Humans.

Although a long-time member of the Federation, there is still much to be learned about this reserved race. Their culture is oriented toward the group rather than the individual. Emphasis is placed on being a part of a *Sia Lenthar*, an Arkenite word meaning "group" or "pack". The larger or more unusual the group, the higher the esteem felt by that member. There is no rivalry between groups as this would diminish the importance of being part of the common race.

RACIAL HISTORY

The Arkenites are descendants of aquatic life. Though they have evolved into air-breathing creatures, they still retain some of the features of their aquatic ancenstors.

Ancient Arkenite society was made up of thousands of migrant groups that roamed the planet in search of food and safety. Later, a powerful group called the *Sia Cathtec*, or "group of dominant power", assumed control of the other groups. During the early part of their reign, they established a social order, with themselves in the ruling class and everyone else in the common class. Eventually, they created another class consisting of those Arkenite commoners who distinguished themselves by their efforts to aid the ruling class. This middle class served the leaders directly, working as guards, asssistants, aand servants.

A few centuries after their rise to power, the members of the *Sia Cathtec* began to grow restless and argue among themselves. After one of their own was killed during an argument, they decided to settle arguments with the lives of commoners. Each leader received equal numbers of common

Arkenites and formed them into armies. Whenever leaders disagreed, they would send their armies into battle to determine who was right.

Having adapted well to being part of a single large group, the common class did not take well to being split up into smaller groups. Working as a single entity, they simply refused to accept the further authority of the *Sia Cathtec*. Although the ruling class attempted to force the populace to obey, the ruling class had lost their leverage. Eventually, without anyone to support or provide for them, the once-powerful dominant group died out completely. The commoners created new leadership, but such leaders were more like servants to the common group.

While forging their interstellar empire, the Andorians subjugated the Arkenites. After the establishment of the UFP, the Andorians themselves sent a diplomatic ship to Arken II to establish peaceful relations and to offer membership into the UFP. After much discussion and arguments within their leadership, the Arkenites decided to accept full-status membership.

PLACE IN THE FEDERATION

Arkenites are often encountered in scientific teams, on trading ships, and in Star Fleet. Many Arkenite trading ships ply the space lanes. These crews are very close and work extremely well together. Their efficiency rivals that of even the most disciplined of Star Fleet crews.

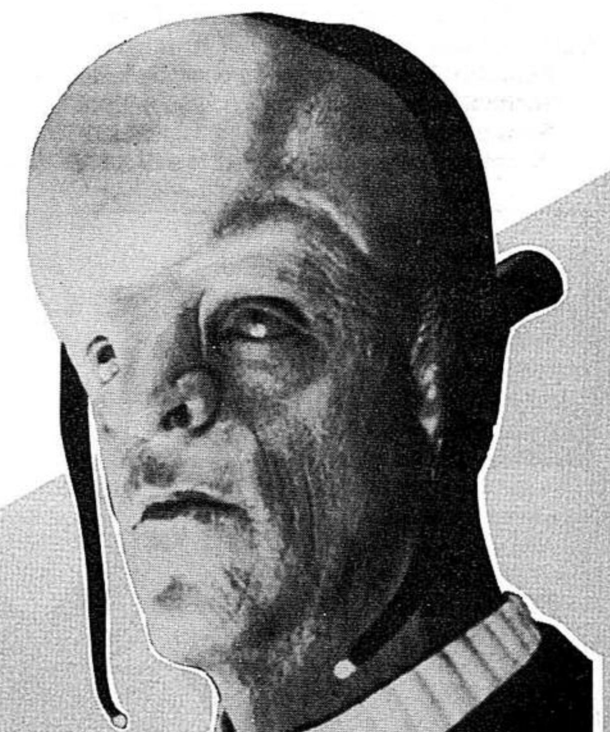
As such a career choice is unusual by Arkenite standards, few Arkenites become members of Star Fleet. These few adopt the crew of their ship as their own group. They consider physiological differences to be meaningless, using other means to separate their group from others (such as Star Fleet versus civilian, officer versus enlisted, and so on). This has made the Arkenites among the least prejudiced races serving in the Fleet. However, they are extremely suspicious of non-Federation races and will never treat a member of such a race as part of their group. This has been the primary factor keeping Arkenites from receiving command-level positions in Star Fleet. Most Arkanites are rather poor leaders anyway, as they tend to be uncomfortable in independent positions. However, as secondary officers and enlisted personnel, they excel.

Most Arkenites in Star Fleet do not take great offense at being referred to as alien; they will simply correct the being who makes the error. However, a few will become distressed at being called alien. Such beings have been knon to sulk for days at being cast out.

SPECIAL NOTE ON ARKENITE PHYSIOLOGY

The distincively bulbous head of the Arkanite contains a complex system of sensory input organs. These organs are very sensitive to changes in temperature, pressure, and magnetic fields. Though very nearsighted, they possess an omni-directional auditory system capable of perceiving frequencies too high for most races to hear. This built-in sonar gives them a keen sense of motion and distance, but does not provide details about distant objects. However, it does make sneaking up on an Arkenite extremely difficult. To maintain their sense of balance, the Arkenites have an organ that orients itself to their planet's magnetic field. This sense can be disrupted by other magnetic fields and is, of course, disrupted when away from Arken II. When this occurs, the Arkenite experiences vertigo.

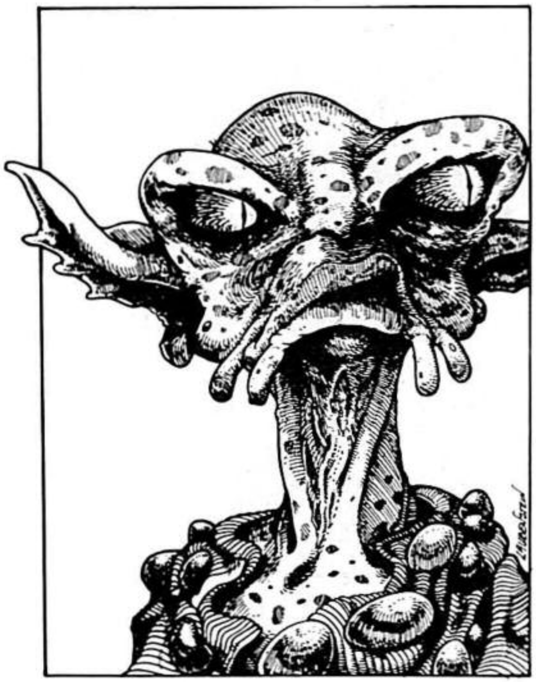
This vertigo has been a trememdous hindrance to their technological development. After a time, this was overcome by the development of a device known as an *Anlac'ven*. Worn over the head, this U-shaped device creates a tiny magnetic field that provides the user with a false sense of balance. Microcircuits alter the magnetic fields to give the wearer continual feedback on his surroundings. In fact, these devices are extremely sensitive to movement, providing the wearer with a perfect sense of balance and direction.



BZZIT KHAHT

World Log: ALTHOS IV

System Data	
System Name:	Nakagima 62B
Map Coordinates:	1.27N 5.38E
Number Of Class M Present:	1
Planetary Data	
Position In System:	4
Number Of Satellites:	0
Planetary Gravity:	.7G
Planetary Size	
Diameter:	9,100 km
Equatorial Circumference:	28,000 km
Total Surface Area:	357,000,000 sq km
Percent Land Mass:	22%
Total Land Mass:	78,540,000 sq km
Planetary Conditions	
Length Of Day:	21 hrs
Atmospheric Density:	Thick
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	17%
Radioactives:	8%
Gemstones:	18%
Industrial Crystals:	1%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Bzzit Khaht
Technological/ Sociopolitical Index:	655658-89
Planetary Trade Profile:	AAADDCE/C(B)



PLANETARY DESCRIPTION

Althos IV has a wide variety of gemstone deposits that any mining concern in or out of the Federation would kill to develop. Many of the small islands in the seas of Althos IV have gemstone beaches where one can make a fortune by beachcombing. Other deposits lie near the underwater volcanoes used by the Bzzit Khaht to generate power for their cities. At this time, the inhabitants are uncertain whether they will permit offplanet mining concerns to develop the wealth of their world. As such a temptation is too much for some, a Star Fleet patrol ship has been permanently assigned to the Federation research facility on Althos IV to warn off illegal miners.

RACIAL DESCRIPTION

The Bzzit Khaht are one of the more unusual members of the UFP. Although Federation scientists on Althos IV have not submitted their final reports, they have released some basic facts concerning this race.

The Bzzit Khaht are intelligent amphibious reptiles that vaguely resemble some species of the Rendar V Dragonlizard. Their hearing and sense of smell are exceptional and their skin is covered with sponge-like glands that are used to regulate coordination and respiration while underwater. They seem to spend quite a bit of their time in the water. Their floating, cavern-like enclosures, known as *Rauctgus*, (or "seatowns"), look very similar to Terran beaver habitats, except for their size. The Bzzit Khaht harnessed the geothermal energies of their planet to power the seatowns, and did so without harming the ecology or geologic stability. The seabeds surrounding these habitats are stocked with a blue moss-like plant called *shaka*, which is the Bzzit Khaht's main food supply. Some of the larger *shaka* planting circles have a diameter of 70 kilometers and are easily discernible from orbit.

Bzzit Khaht society is divided into three segments. The most common of these is the *Bzzgaht*, or "Gatherers". The *Bzzgaht* tend the seatowns and underwater fields of *shaka*, and construct new settlements when they 'feel' that expansion is necessary. These psionic feelings seem to be possessed by every one of the Bzzit Khaht.

The second division of the Bzzit Khaht is the *Bzzmaht*, or "Routers", who oversee *Bzzgaht* parties while they carry out an assignment. A *Bzzgaht* does not get promoted to *Bzzmaht*; they seem to be born into their position. No physiological differences between the two are apparent. There seems to be approximately one *Bzzmaht* born for every 20 or so *Bzzgaht*.

The third and final division of Bzzit Khaht society is the *Bzzbaht*, or "providers", the leaders and progenitors of their race. They appear somewhat larger than either the *Bzzgaht* or *Bzzmaht*, and each seatown usually has between two and four of them. The providers' main duty is to bear and raise the young of all three social divisions. The *Bzzbaht* also are considered the theoretical leaders of their various seatowns (it is very difficult to explain the word "leader" to the Bzzit Khaht), and they are usually the ones that deal with offworlders.

There are three divisions of Bzzit Khaht society, but they are not classes in the usual sense. Every individual is equal in Bzzit Khaht society, which is divided only to increase efficiency. The Bzzit Khaht are a cooperative unity without strife or disagreement. They have no government structure because every individual is in complete agreement with every other individual. Working for the betterment of their race is their personal goal as well as their communal goal. It is not that every individual knows the thought of every other; rather, every individual knows the desires and need of every other individual. Legend tells of a seatown that was demolished by a tidal wave, and within hours, every other seatown had dispatched aid to the area without knowing of the disaster. The people simply knew that a need had to be filled there. As his psionic ability does not transfer well to other races, the Bzzit Khaht cannot really be termed empathic.

The Bzzit Khaht are fairly sophisticated medical scientists, having eliminated most of the bacteriological hazards that once plagued the swamps and shallow seas of Althos IV. Although still brief by Terran standards, the Bzzit Khaht now live 30 to 40 standard years, whereas a few centuries ago, they could expect to live less than 20 years.

RACIAL HISTORY

The road to intelligence for the Bzzit Khaht is presently unclear. References to the Gironapir, or "Awakening", are common in Bzzit Khaht language and history. Apparently, thousands of years ago, the Bzzit Khaht (who were then simply amphibians swimming in the seas of Althos IV) became aware of each other through some sort of psionic jolt. They began to communicate and work together to develop a new society, and have continued this process ever since.

Before contact with the Federation, the Bzzit Khaht had developed a fairly technical society on their own. They had sent chemically powered spaceships throughout their entire system and were in the process of setting up permanent space platforms in orbit about Althos IV and the gas giant Althos V. They also had begun to mine the gases out of Althos V for use as rocket fuel. Amazingly, they had achieved all this without discovering atomic fission, although they did understand the theoretical principles involved. When asked about this curiosity, *Bzzbaht* say that nuclear power just wasn't "right" for the Bzzit Khaht society.

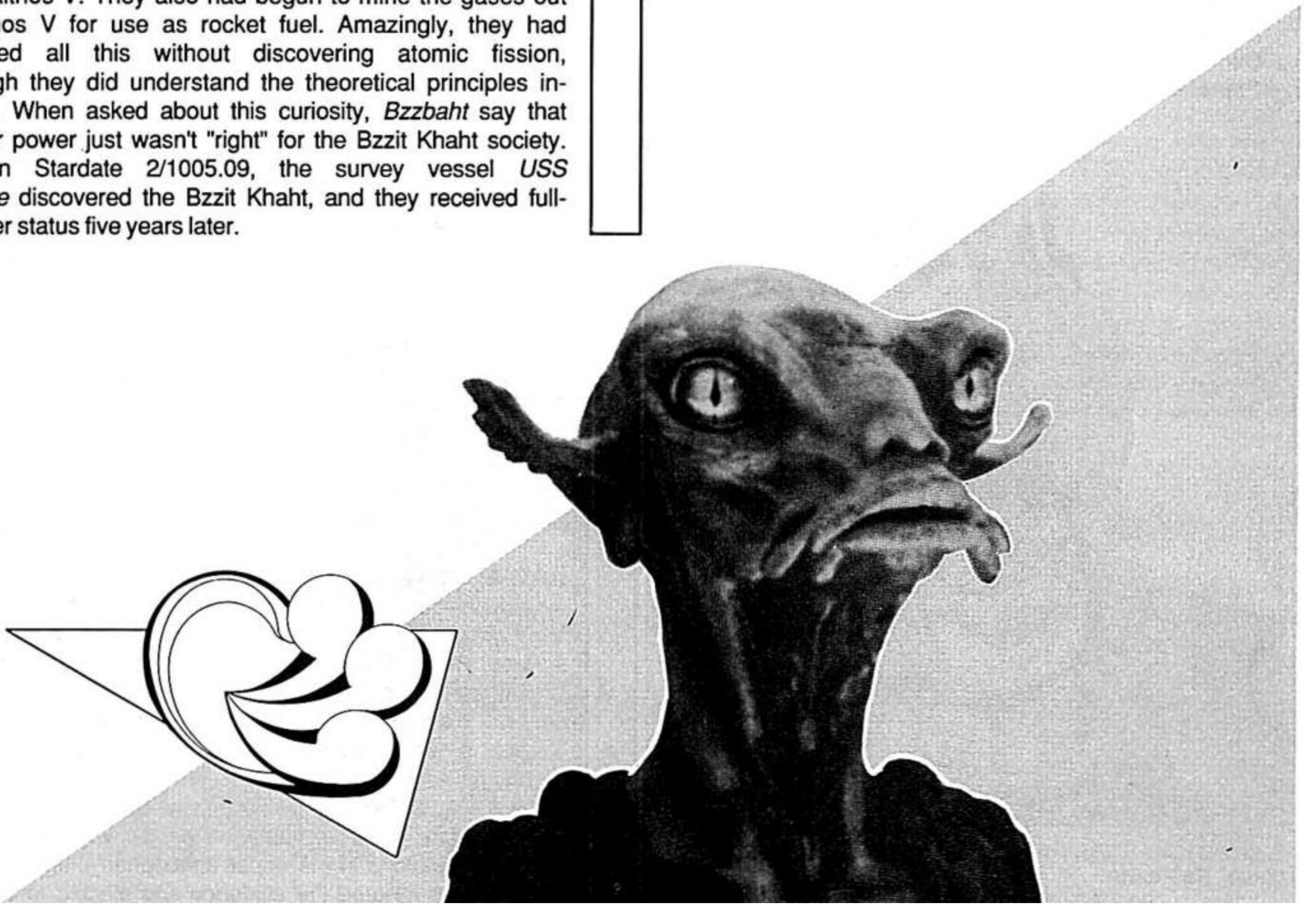
On Stardate 2/1005.09, the survey vessel *USS Chaffee* discovered the Bzzit Khaht, and they received full-member status five years later.

PLACE IN THE FEDERATION

The Federation still has much to learn about the Bzzit Khaht. A research station has been set up on Althos IV with the permission of the Bzzit Khaht, who have just recently begun sending envoys to various Federation worlds. Although their mouths can just about handle speaking Galacta, the gurgling and hissing is sure to irritate listeners. Therefore, Bzzit diplomatic Khaht expeditions travel with a number of experienced linguists, sociologists, and universal translators.

Being water creatures, the Bzzit Khaht need special accommodations while offplanet. Their skin needs a good soaking at least once a day or else serious chaffing, discomfort, and even dehydration will result. The sponge-like hydrous membranes on the skin of the Bzzit Khaht release a stink that most races find very offensive. However, Federation scientists have developed a special aerosol deodorant that the Bzzit Khaht can spray on when attending interracial affairs. This product seems to have made a hit with the Bzzit Khaht, who have sent the formula back to Althos IV so that they can begin mass production.

How the relationship between the Bzzit Khaht and the Federation will develop is still unclear. The Bzzit Khaht make exceptionally accurate acoustic systems, rivalling those from planets with more advanced technology. With a population of over ten million inhabitants all bent on the same goals and ideals, it is certain that their race can develop much faster than the usual races of bickering, opionated individuals.



the DAYEN

A Profile of a Minor Race

by Peter R. Rogan illustrated by Janet Aulisio

World Log

System
Name: Zaniah (Eta Virginis)
Number of Class M Present: 1
World Name: Orodanga
Position in System: 3
Number of Satellites: 2
Planetary Gravity: 1 G
Planetary Size:
Diameter: 12,000 km.
Equatorial Circumference: 31,000 km.
Total Surface Area: 450,000,000 km.^{2}
Percent Land Mass: 72%
Total Land Area: 350,000,000 km.^{2}
Planetary Conditions:
Length of Day: 28 hrs.
Atmospheric Density: Terrestrial
General Climate: Desert
Mineral Content
Normal Metals: 96% Radioactives: 23% Gemstones: 8%
Industrial Crystals: 44% Special Minerals: 7%

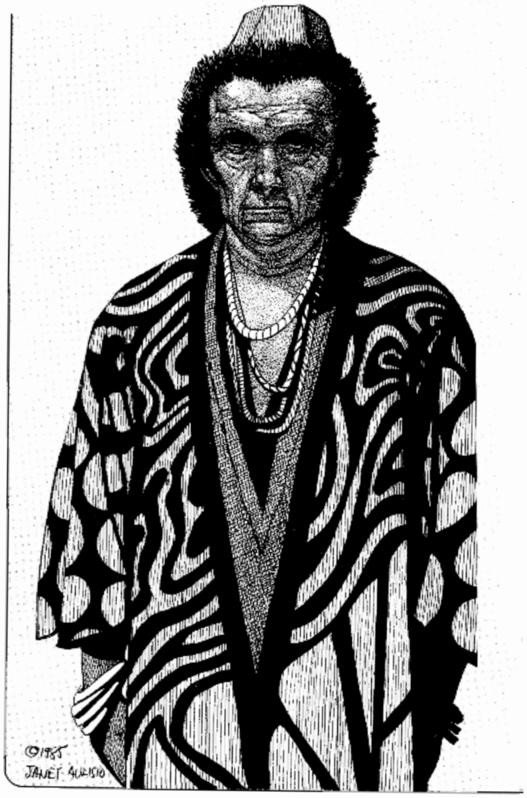
Life and Civilization Log

Technological Index
Space Science Index: 7 Physical Science Index: 8 Engineering Index: 8
Planetary Science Index: 9 Life/Medical Science Index: 5
Psionics Index: 1
Sociopolitical Index
Social Science Index: 7 Cultural Attitude Index: 8

Planetary Trade Profile

Foodstuffs & agricultural goods: G
Normal minerals and raw materials: A
Radioactives and special minerals: D
Drugs & refined medical agents: E
Low-technology manufactured goods: A
Medium-technology manufactured goods: C
High-technology manufactured goods: E
Luxury items: A
Population rating: (D)

★



Here and there in the Federation are races that have not developed spaceflight on their own but who are nonetheless full Federation members and citizens. One of these, the Dayen, are typical of the so-called 'minor' peoples of the Federation.

In appearance the Dayen are humanoid, with an average height of about 115 centimeters (about 3′ 9″) and an average mass of 45 kilograms (around 110 pounds in a one-G field). Their skins are typically a rich metallic bronze in color, possessing a natural luster that makes them seem actually shiny, as if they were of polished metal. Their features are quite regular by human standards, save for a somewhat more bulbous nose, and a tendency to facial skin-folding and wrinkles at a relatively early age. The average Dayen lives about 75 solar years; females tend to live a little longer. Hair colors vary from deep black to a dull brown and an extremely dark red, that looks brown unless under a strong light. Their eye colors are dark, with an occasional bronze showing up.

The Dayen homeworld is called Orodanga, third of seven around Zaniah, the star Eta Virginis. It is more than 72% land area, with small and mostly-narrow seas of high mineral and salt concentrations ringed by ancient rounded mountains. The coastal strips, where the majority of Dayen live, are heavily populated and intensively cultivated. Beyond the mountains lie the planetary upland plateaus, nearly 2,000 meters (6,500 feet) higher than the coasts, a flat and arid region with little rainfall or vegetation. Visitors from Earth's Australia have compared these plateaus to the bleak but striking gibber deserts of home. The only habitations found here are mining encampments and exploration camps, many like miniature cities rising from the waste, built of metal and stone with a carefully-cultivated strip of green around them.

At one time in Orodanga's past primitive tribes of nomads roamed the arid interior, but even they clung mostly to the slopes of the mountains where sparse grazing could be had, and nowadays they are all but gone. Dayen civilization began on the relatively richer and more fertile coasts, and though it has spread to the mountains it has not gone past them. From the tropics to the edge of the arctic zones the shores of the Ayusan and Hyrian Seas are thick with compact Dayen cities, their efficient gigantic farms and carefully-managed parklands and wilderness, but once over the mountains the light of civilization fails where the lifeless plateaus roll endlessly to a dead horizon.

The major spaceport is by the city of Mossaben, 'the jewel of Orodanga.' It lies on the east coast of the Ayusan Sea on the beautiful Colaten Peninsula, and has been likened to a San Francisco with a better climate. Its gleaming metal towers are home to more than four million Dayen, the largest city on the planet. Its facilities for offworlders are excellent, from hotels and specialty restaurants to the trade exchange, and include museums of Dayen art and technology geared for foreigners with translators, audio-visual aids and hands-on exhibits. Most of the major Dayen engineering firms have offices here; the company that does not probably has a mobile headquarters somewhere in space.

Dap, like Mossaben, is a major city on a peninsula, and unlike its neighbor to the north, has a hilly topography and a more rounded and domed architecture. Its climate is clearly tropical, and frequently rainy—it is, in fact, the rainiest city on a water-poor planet. It is the foodbasket for the world, close to the southern farmlands and possessed of a superior transportation system of rail, seaborne, and gravitic haulers. For all that Dap, like Mossaben and most other Dayen cities, is still a major manufacturing center. Its transport system brings metal out of the deserts to factories here and elsewhere across the planet.

Visitors to Orodanga who do not come entirely for business may find the islands of the Gurud Archipelago, in the Ayusan Sea some 700 kilometers west of Dap, a very pleasant and surprising place. Once the seat of an ancient seafaring nation, now a verdant chain of resorts and private estates, the Gurud Islands offer Dayen and offworlders a chance to explore ruins, wander in primeval (and scarce) forests, and even venture to sea in Dayen skiffs, called *dafu*. Halfway around the world, on the west coast of the Hyrian Sea, the Venian Peninsula presents a quite different scene. In the temperate zone of the southern hemisphere its evergreen forests and snowcapped mountains stand inviolate, a last bit of pristine Orodangan wilderness. Aside from some little fishing, most of it out of the nearby port city of Calber, the Venian Peninsula depends entirely on tourism and some carefully-supervised forestry to support its sparse population. It was here that Terrestrial enthusiasts established the first Dayen ski resort on Uilam Gng—the Golden Mountain.

Aside from these few places, most of Orodanga is a workaday place, its cities given to manufacture of technological goods, mostly for export. Its pleasantly populous coasts, intended for the use and enjoyment of a race that likes crowds, can be a little hard to take after a time. Even the Dayen feel it, occasionally, which is why there is tourist trade and private settlement on the upland plateaus. Far north on the massive Malak Plateau is a brackish but sizable body of water called Toka's Sea. It was semi-legendary until discovered by an overland expedition only three centuries before. Out on its surface giant factory complexes extract industrial chemicals from the brine. On the shore, here and there, are encampments of people seeking to get away from it all as few people have. For the truly adventurous there are even escorted—and some unescorted and unauthorized—tours of the interior. Most of the dry expanses of the Malak and Rata Plateaus are legally, theoretically, possessions of the ancient nations across the coastal mountains, but in fact they are nearly totally empty tracts devoid of life and even of geologic features. Yet here and there are exceptions, starkly alone in the wastes: a scrub bush, a forgotten skeleton, some tiny sign of life gone or still struggling to live. On the desiccated plateaus, so like a different and dead world, there still are the rings of craters left over from the primordial meteoric bombardment.

Perhaps the best way of describing the desolation of the upland plateaus is to mention that, just three years ago, another secret and illegal Tellarite mining camp—abandoned many years before—was found out in the open far from the mountains, and it is not expected to be the last.

For Orodanga's claim to fame is its great wealth in metals, most but not all of them found on the upland plateaus. Metals and metallic salts lie heavily on the planet's surface, and even in the tissues of its plants and animals—and the Dayen. Without processing, Dayen foodstuffs would be poisonous to offworlders; most food imported to Orodanga, a large part of the Dayen diet, must be 'fortified' with metals to make it nutritious. Even the surface water contains metallic traces, and the seas are so metal-heavy that the average offworlder can float easily in them. The seas are fairly good conductors of electricity, too. A lightning-strike many miles away can incapacitate or even kill a non-Dayen swimmer; seawise Dayen keep a wary eye on the weather and keep close to their boats. This wealth in metals attracted illegal miners once, and it has always been a major factor in Dayen technological progress.

"People should deal with the Dayen frankly and directly....try to bluff them, and they'll treat you like an unmannered and rude slob."

When first contacted by the Federation, Stardate 1/0205, the Dayen had only recently discovered interplanetary spaceflight, and were in the process of exploiting the worlds of their own planetary system. They were a little disconcerted to find they were only decades behind other races in producing a faster-than-light drive. Their culture and technology were only slightly behind those of the human race, but their population, being smaller, and their basic drive to perfect existing technology, made it uncertain how soon in fact they would have developed interstellar flight on their own. A later Federation would have put the Prime Directive over the Dayen and let them figure out their own fate. But when Orodanga was first contacted, no one understood this race was just a little behind the rest of the Federation technologically, and no one anticipated the effect the importation of technology would have on the culture.

For many years after contact Orodanga was a major industrial world of the Federation, and a memorial stands in Mossaben near the spaceport commemorating their contributions during the Romulan War. By the middle of the twenty-second century, Orodanga no longer had this status. Its technological development had stalled, either through the importation of Federation technology, which was copied, or else the basic process of contact had stopped all desire to advance Dayen technology through an unknown mechanism. Save for specially-contracted goods, Orodanga possesses much the same level of technology it had when first discovered. More disturbingly, it is not clear, even now, whether this halt in technological advancement is permanent. Worlds develop industry at varying rates, some slower than others; it is feared that Orodanga's rate was so slow, its progress so delicate, that Federation trade may have stopped it entirely.

For all this worry, the Dayen have managed to remain a potent industrial force in the Federation on the strength of their mining and extractive engineering technology, which remains among the best in the Federation.

The Dayen have become famous as mining experts of the first water. 'It'll take a Dayen to dig it out' is a rueful tribute to their ability to find and remove mineral wealth from anywhere at all. When oil was first discovered at a depth of 30,000 meters, Dayen engineers found a way to get it to the surface without an explosion or fire. The Tellarite-built Massteroid Masticator uses Dayen space-mining technology to harvest industrial-grade ore from asteroid belts. It is hard to find a mining venture anywhere in the Federation that does not have, or did not consult, a Dayen engineering team.

Still, the Dayen remain sensitive to being regarded as a 'second-class' race because of the lack of technological advancement on their homeworld. They avoid discussing the topic as much as possible; there seems to be little they can do personally, and if their mining expertise cannot speak for itself, well, there's little enough else to say about it.

When by themselves, or not made to feel self-conscious, the Dayen are a vital and energetic people. Their language has many hand gestures used for emphasis and, if it is not musical to human ears, it nonetheless has the busy rhythm of a bubbling brook. When not at work, where they wear overalls, T-shirts or spacesuits as required, the Dayen show a fondness for color and pattern that is just a little short of riotous. The usual formal garb, for the men, is a jellaba-like shirt, with an open V-neck and large sleeves reaching just below the elbow. These come in many patterns, colors and lengths; most are strong in reds, yellows and blues, with intricate designs running parallel to the neckline and extending the V-shape to the hem, which is usually between waist- and knee-length. Shorts and open sandals complete the costume, with a truncated-cone hat, very like a fez and usually dark red, which is worn indoors and out. Dayen women tend towards much simpler dress in color and pattern, when they are not at work; they wear a simple belted tunic or a wraparound like a sari, usually of a single color with an occasional simple muted pattern, and the universal sandals. Women may wear earrings sometimes, small and simple ones. Dayen males tend to wear much more jewelry, including necklaces, bracelets, rings, and, among the upper classes, earrings and brooches. A Dayen with a gem set into his fez is a high-ranking man, indeed.

Socially the Dayen are monogamous, though there is a polygamous sect called the Menuu that is an accepted – or tolerated – minority. They have extended families and live, when they can, in large homes with as many as four generations under one roof. Dayen households are noisy but rarely boring. They are fond of friends, and music, and conversation, and prefer a large social gathering to almost any other form of amusement. Public entertainment among Dayen tends to be a boisterous and conspicuous affair, but a great deal of fun for the non-stuffy.

The typical Dayen's life is usually very active, highly social and riddled with proprieties and religious obeisances. From childhood he or she is expected to recognize and know all their relations, their schoolmates and their neighbors by name and degrees of relatedness. At adolescence, the young Dayen are separated by sex and remain separate until marriage. The Dayen concept of 'separate' is not the human one; it means either a teenager is with a group all of the same sex, or a mixed gathering with at least one adult couple chaperoning. Both sexes are urged to complete their educations, get married and start a new household or at least add themselves to an existing one. It is not unusual to see husband-and-wife teams, often several of them part of a single clan, go into space to work together. Dayen men may do the negotiating and the 'front work' that most people see, but the Dayen engineering team, which may be a large family working together, is always more people than it seems. It is a mistake to think that Dayen women are not equal partners in the work – and the reward.

The Dayen family structure insures a contented life for every Dayen save the very unfortunate or the outcast. The very aged, who are encouraged to be active in the education and upbringing of the youngsters, stay with their chosen clan as long as they choose to honor them with their presence. The clan that drives off an elder has made itself an object of scandal. Yet many older Dayen, male and female, can be found putting their knowledge to work on an engineering team just like their younger co-workers – or children, or grandchildren, as is often the case.

The Dayen have only a few shortcomings, as a race. They do not trust outsiders who are not able to comprehend the cozy-claustrophobic Dayen social world, or understand the easy familiarity that exists between all Dayen regardless of social standing. They are very uncomfortable with unfriendliness, which they quite literally don't know how to deal with, and if they feel they are being left out of business that is rightfully theirs they will complain, and bitterly. They will cut themselves off from people, paradoxically, whom they feel are not being fully open with them. They have a hard time understanding the concept of 'formality' or 'dignity'; their buddy-buddy way of doing business has no need of such things. Their approach has won them many friends in places like Texas. They do not comprehend Vulcans at all, and cannot understand why other people put up with them when Dayen can design machines that could work just as well in their place without being confusing. They are also fond of chatter and argument; perhaps a single Dayen would be outgunned by a Tellarite but since the Dayen are fond of (and used to) arguing in groups, no one Tellarite can stand up to them.

Medically the Dayen, in spite of their long association with mining and manufacturing, have a surprising sensitivity to many chemicals. This may be due to the high proportion of metals in their bodies. They are very sensitive to alcohol, and a dose that a human might ingest with no ill effects, can make a Dayen roaring drunk or knock him unconscious. Drunkenness is unknown among the Dayen save as a pathological condition, a precursor to shock, coma, and death. When they do drink socially (and Dayen drink no other way), they do so in extreme dilutions. They also have a high intolerance of certain hydrocarbons, and when working around petroleum they must wear protective suits against vapors or stray splashes, which can be toxic to them. Aspirin, to Dayen, is a systemic poison. Dayen cannot tolerate tobacco or strong smoke, though for the sake of being friendly they will stay in the presence of people who do. They will cry, however, when they have to do this, and this seems to upset other people.

For all their openness the Dayen are sensitive, extremely so, about some things that they will not willingly discuss in public. Family disputes have no public forum, for instance, though an individual may complain around them. They may debate the question of their homeworld's 'backwards' technology heatedly, but they would rather not. Some questions about social life and family concerns and relations are just not brought up, and will not be answered if asked. They cannot understand criticism of their social order, and if someone is foolish enough to do so, they had better be prepared to be gang-argued about the value of privacy and of having some concern for others.

One common conversational mistake people make in talking with Dayen is to assume that they are sensitive about their height. They are not; they tend to think other people are far too tall, and look funny, too. The casual, thoughtless remark about their stature is likely to bring a quick retort about the altitude of the speaker. Dayen may have the largest collection of 'tall' jokes in the Federation, and absolutely no compunction about using them. But the person who meets them, and tiptoes around their shortness, is likely to be bombarded with hostile questions: What's bothering you? Why won't you say? What're you hiding?

People should deal with the Dayen frankly and directly. They appreciate it, expect it, and they'll respect you for it. Try to bluff them, and they'll treat you like an unmannered and rude slob.

Dayen are a complex and individualistic people, a colorful and intriguing race of the Federation, 'minor' or not. They are not often seen; they made one brief appearance in "Journey to Babel" when two of them pushed under some taller delegates to get to the refreshment table. That's largely been it. But, now that their story's been told a bit, they might be seen a little more frequently.

STARDATE MAGAZINE #5/6 APRIL 1985

MIXED BLOOD

by **Jeffrey K. Mills**

"We've run a number of blood tests on Mr. Spock; it isn't true Vulcan blood either. It has human blood elements in it."

Christine Chapel
"Journey to Babel"

With this and many other quotes from *Star Trek*, we can see that Mr. Spock is not only different from normal humans, but from normal Vulcans as well, both mentally/emotionally and physically. Why then, does ST:RPG2 not reflect this fact? I, for one, see it as an opportunity for yet another possible character race, one which would add greater flexibility to the game.

ST:RPG2 reflects half-human/half-Vulcan characters in an unusual way by simply stating that the characteristics of a half-Vulcan will conform to the type of culture the character is raised with and the planet he/she is raised on. While it is true that persons, whether human, Vulcan, Caitian, or whatever, will vary somewhat depending upon the planet that character is raised on, it is to be assumed that the majority of planets covered in ST:RPG2 are so close to the norm as to be virtually the same. This seems to be a "universal constant". Anything else would be extremely time-consuming in terms of the time it would take to explain the differences between them.

We cannot avoid discussing the planetary characteristics of Vulcan, however. It is a hot, dry planet with a slightly heavier gravity and a thin atmosphere. This, presumably, is primarily why Vulcans receive the modifiers they do on their initial ability scores. Vulcan's harsh conditions have bred a hardier race, accounting for the increased STR and END scores.

Culture, too, plays a part in the differences between humans and Vulcans. Vulcan has an extremely logical society, conditions which easily lend themselves to intellectual pursuits, explaining their increased INT and PSI scores. The logical basis of their culture gives us the reason for the reduced LUC of Vulcans as well. A people as logical, and hence, analytical as the Vulcans will have a much more difficult time understanding and interpreting illogic than a human would.

So we can see that it is possible that a Vulcan raised on Terra or a human raised on Vulcan would be slightly different physiologically than if raised on their native planet. A human raised on Vulcan would be used to the altered conditions present on Vulcan, but be very uncomforable under standard Terra conditions. And a Vulcan raised on Terra could hardly help but be more emotional as well as less adept in harsh conditions, but would possibly possess some measure of human intuition (luck).

As we have discussed, half-Vulcan physiology differs from either human or Vulcan. But, although there would be some small variation between Terra-raised Vulcan physiology and that of native Vulcans, the base adjustment would still be +10 to STR and +5 to END.

Cultural factors also play a major part in one's upbringing. The cultural environment a child is raised in affects him throughout the rest of his life. It is difficult, at best, to try to change one's behavior patterns. Therefore, a half-Vulcan raised on Vulcan would receive the full +10 to INT, −40 to LUC, and no modifier to PSI, while one raised on Terra would receive no modifier to INT or LUC, but a −30 to PSI. The half-Vulcan raised on Terra would probably not be trained in Vulcan psionic techniques, either.

With the introduction of Saavik in *Star Trek II: The Wrath of Khan*, we encounter a whole new series of problems. From *"Balance of Terror"*, we are able to form a possible hypothesis that Vulcans and Romulans evolved from the same parent race. In *"The Enterprise Incident"*, this theory is further proven by the similarity in the cultural rituals of the two races. Considering these factors, it should not be too difficult to believe that the two races are genetically compatible for interbreeding. Saavik is such a hybrid. Although not emphatically stated in the last two films, the novelizations clearly state that she is the offspring of a rare Vulcan/Romulan cross. While it is probably true that Saavik is not the only hybrid of this kind, they are extremely rare, far more so than Human/Vulcans. The Vulcans and Romulans do not normally associate with each other, and their cultural views have radically diverged, so even if they were together, it is unlikely that the two races would ever mate or marry. Because of this, the resultant hybrid probably occurred from a forced intermingling of the species. It is illogical for Vulcans to behave in this manner, so we must conclude that Romulans force themselves on Vulcan captives.

The physical characteristics of the Vulcan/Romulan cross would be very similar to those of either race individually; Romulus and Remus are worlds almost as harsh as Vulcan. Therefore, a +15 to STR and a +10 to ENDwould be the physical characteristics of the hybrid. All Vulcan/Romulan children would probably gain the Romulan's increase in DEX of +5, due to cultural conditions placed on them within the Star Empire during their very early years. Culturally, the Vulcan/Romulan offspring will almost always be initially brought up within the Romulan Star Empire due to the circumstances under which they were conceived. If rescued by the UFP, these children could be raised on Vulcan or elsewhere in the Federation. For Vulcan/Romulan hybrid player characters, it can be assumed that they will take on the cultural characteristics of whichever type of campaign they are participating in; a Federation or a Romulan one. Hybrids raised within the Star Empire would, therefore be more intuitive than their Vulcan cousins (LUC only −10), but not as highly trained in psionic disiplines (−20 to PSI).

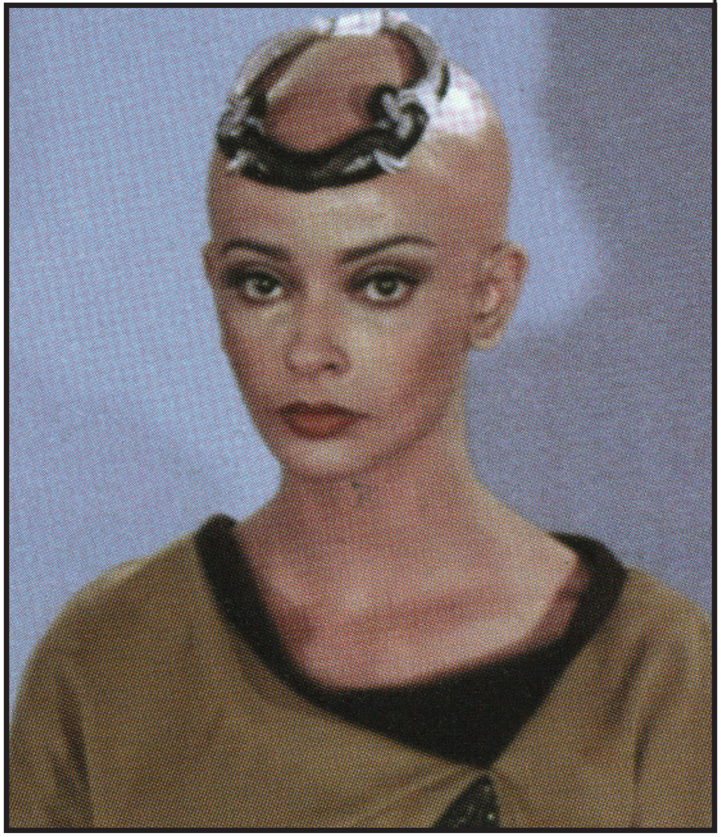
On the other side of the Neutral Zone, these hybrids would gain both benefits and detriments from their initial exposure to the Romulan Way and later exposure to Vulcan Mysticism; they would likely be more intuitive than pure Vulcans (LUC −30); they would have full psionic training but not be as adept with it (PSI −10); and their later educational and cultural training would place less stress on the intellect (INT +5).

	STR	END	INT	DEX	CHA	LUC	PSI
Vulcan/Human							
Vulcan Culture	+10	+5	+10	–	–	−40	–
Human Culture	+10	+5	–	–	–	–	−30
Vulcan/Romulan							
Vulcan Culture	+15	+10	+5	+5	–	−30	−10
Romulan Culture	+15	+10	–	+5	–	−10	−20

■

DELTANS

World Log: DELTA IV	
System Data	
System Name:	Delta Principus
Map Coordinates:	0.12S 1.02 E
Number Of Class M Present:	2
Planetary Data	
Position In System:	IV
Number Of Satellites:	7
Planetary Gravity:	.95g
Planetary Size	
Diameter:	15,000 km
Equatorial Circumference:	47,000 km
Total Surface Area:	706,900,000 sq km
Percent Land Mass:	60%
Total Land Area:	375,000,000 sq km
Planetary Conditions	
Length Of Day:	20 hrs
Atmospheric Density:	Thin
General Climate:	Cool Temperate
Mineral Content	
Normal Metals:	550%
Radioactives:	15%
Gemstones:	10%
Industrial Crystals:	Trace
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Deltan
Technological/ Sociopolitical Index:	988767-87
Planetary Trade Profile:	ABABCCB/B (C)



PLANETARY DESCRIPTION

Delta IV is a particularly lush Class M world. As its star, Delta Principis, is a blue giant, the planet is bathed in soft blue light. Delta's soil is unusually fertile, and plants from all over the Federation have adapted quickly to the Deltan climate.

RACIAL DESCRIPTION

Deltans are a fairly recent addition to the Federation. Averaging 1.7 meters high with a medium to slim build, these humanoids' most noticeable physical feature is their natural baldness. Although roughly equal to Humans in strength, intelligence, and dexterity, they are somewhat less lucky, more psionic, and more charismantic. This high level of charisma is a direct result of Deltan mental powers.

Deltans are basically sensualists, being primarily motivated by intense physical experiences. According to their religion, existence is a chain of experience, and life is simply a single link in that chain. No one knows what is at the end of that chain or even what the next link of the chain will bring. Life is experienced only once, and the individual must gather as much experience as possible before proceeding to the next step of existence. Once the individual has passed beyond life, the chance to experience many things will be lost forever. Most Deltans choose to experience pleasure to its fullest intensity, but some actually prefer the experience of pain. Neither path is considered less or more by Deltan society.

Deltans almost always travel in groups of two or more because of their need for close relationships. These relationships involve a level of initimacy so intense that Humans could not survive it. Because of this, Deltans keep themselves emotionally separated from Humans, making them seem cold and aloof. Most Humans find this puzzling, as general beliefs about the Deltan way of life suggest the opposite.

RACIAL HISTORY

During the early centuries of Deltan civilization, the people thrived on the plentiful food and the cool, temperate climate of the planet. Eventually, overcrowding began to mar the otherwise comfortable Deltan lifestyle. Cities housed over 30 million people, and the Deltan's primative waste disposal system only added to the problem.

Eventually, a new and deadly virus developed and spread like wildfire throughout the population. Before they could lean how to combat it, the plague had claimed over 20 billion lives, about 90 percent of the Deltans.

The few scattered survivors were devastated. Being so accustomed to the crowded life of the past, they banded together in groups, forming close attachments to one another. Coupled with their natural intensity of experiences, they soon became extremely dependent upon these intimate relationships.

Aside from the obvious impact on the population, the plague had a major effect upon Deltan society and philosophy. Deltans put a great deal of effort into scientific study and advancement, believing that the disaster would have been averted had their scientific knowledge been more advanced. The event marked a rapid rise in Deltan technology, which has become superior to the Federation standard in some ways.

After the disaster, Deltans decided to control the propogation of their race, but with out losing their necessary high level of intimacy. Eventually, they began to rely more and more on their empathic powers to intensify their experiences. The following centuries were mercifully calm, allowing the Deltans to concentrate on psionic and technological developments.

A few hundred years after the great plague, the Deltans developed space flight. Shortly after that, the Federation starship *USS Austin* discovered the planet Delta and, consequently, the power that the Deltans possessed over Humans. After an incident involving the death of one of the *Austin*'s officers, a quarantine was placed on Deltan space, and no vessels of any kind were allowed to enter the region until the problem could be overcome. Realizing the fragility of Humans, the Deltans made an agreement to refrain from having any sort of intimate relations with Humans.

PLACE IN THE FEDERATION

For a long period after Delta IV joined the Federation, Deltan and Human contact was kept to a minimum. Eventually, however, Humans learned to cope with the attraction, and Deltans learned to muffle their effect on Humans. Still, this control is fairly short lived, and so Deltans tend to keep themselves away from Humans and close to their own kind as much as possible.

Deltans can usually be found serving as diplomats or in Star Fleet. Deltan diplomats wear an ornamental turban signifying the individual's mastery of his empathic emanations. The ornament is made of either gold or silver and is worn whenever in the presence of Humans. Deltan diplomats must have a high degree of empathic control, as the effect of their emanations would cause tremendous complications in planetary relations.

Deltan members of Star Fleet are found almost exclusively in science or science-related fields. These include the navigation, engineering and medical branches. Because of their dedication and business-like efficiency, Deltans almost always excel in their jobs. Much of their drive comes from their desire to expand the limits of scientific knowledge.

No matter what their jobs, however, Deltans are often a prime choice for landing party detail, as their desire for physical experiences gives them a keen sense of awareness. Most Deltans enjoy investigating new planets because such assignments present the opportunity for a new experience. To help prevent shipboard problems, Deltans wishing to join Star Fleet must take an oath of celibacy that applies toward Humans.

DELTAN PSIONICS

The Deltans have developed four psionic talents. Although different form Vulcan psionics, these are nonetheless powerful. Their mental powers are based on empathy, which is the transfer of emotions from one being to another.

The first mental power is actually more a byproduct of the Deltan's empathic capabilities than a power. It influences Humans of the opposite sex, making the Deltan seem extremely attractive and desirable. The strength of this emanation varies between Deltans, but is often very powerful. Though Deltans can to control this power, to suppress it requires great concentration and constant contol. Only those with high psionic ability can maintain control for a long period of time.

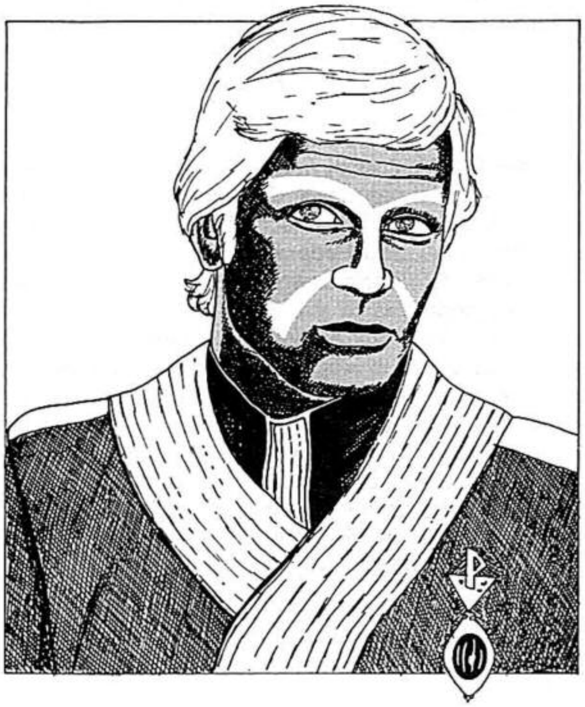
The second empathic power is very similar to the first. By touching another being, the Deltan can impart to him a high level of awareness and sensitivity. This power cannot be controlled, as it continually flows through the body. Any physical contact with a Deltan causes a tremendous surge of physical awareness, rivalling the effects of many stimulants.

The third power is an empathic link shared between a Deltan and his mates. A Deltan can establish the link at any time, and it remains in effect until 'shut off' by either the sender or receiver. Through intense concentration, a partner may transfer the emotions that he is experiencing to the other. The Deltan receiving the emanations can actually identify people and events by the exact emotional reaction felt by the sender. Though this process is similar to a Vulcan mind probe, the person receiving has no control over what he receives. The range of this link is not known to non-Deltans, but it is generally believed to extend for thousands of miles. Breaking this link requires a great deal of effort, but is even more traumatic for one not prepared for it.

The final Deltan power is more a mental discipline than an empathic ability. This mind-over-body control can be used only once, as it effectively shuts down all bodily functions. A Deltan might employ this ability if he no longer desires to face further experiences, or if he wants to feel the 'ultimate experience'. As Deltans are an experience-oriented culture, very few Deltans practice this discipline.

EFROSIANS

World Log: EFROS	
System Data	
System Name:	Flarset
Map Coordinates:	0.78S 6.26E
Number Of Class M Present:	1
Planetary Data	
Position In System:	IV
Number Of Satellites:	2
Planetary Gravity:	1.1G
Planetary Size	
Diameter:	14,300 km
Equatorial Circumference:	45,000 km
Total Surface Area:	642,400,000 sq km
Percent Land Mass:	36%
Total Land Mass:	231,000,000 sq km
Planetary Conditions	
Length Of Day:	29 hrs
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	46%
Radioactives:	17%
Gemstones:	8%
Industrial Crystals:	9%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Efrosian
Technological/ Sociopolitical Index:	988867-86
Planetary Trade Profile:	EDDBCDE/B(B)



PLANETARY DESCRIPTION

The name "Efros" means "ice" in the Efrosian tongue. The planet is a cold, harsh world that only in the last thousand years emerged from a millenia-long ice age. Few native animals live on Efros, as the climate makes it extremely difficult for plants to thrive. However, the abundance of metal on the planet makes it valuable nonetheless.

RACIAL DESCRIPTION

The Efrosian are among the newest members of the Federation, having first been contacted only eight years ago. There is some evidence suggesting that the race did not originally evolve on Efros. Perhaps the Efrosians are yet another of the races that the Preservers seeded throughout the galaxy.

The most striking feature of the Efrosians is the sculptured look of their facial features. This particular development was the result of exposure to the cold, harsh winds of Efros. Although the primitive Efrosians wrapped their bodies in warm furs, they neglected such protection for their faces. As a result, the fierce winds scorched their faces, and later generations developed thick layers of fatty deposits beneath their facial areas. Thus were their faces protected from the harsh, cold winds, and the feature has become an inherited racial trait.

Another distinguishing mark of Efrosian physiology is the difference in coloration between the sexes. Efrosian males all seem to have fair hair and complexions—some almost look like albinos. On the other hand, Efrosian females are usually raven-haired. Studies have not yet indicated if this is the result of selective breeding early in Efrosian history or if it is some natural phenomenon. It is interesting to note that giving birth to a boy with dark hair brings shame upon a family. To most people, such a male's coloring brands him as a female.

RACIAL HISTORY

While the ice age raged across the surface of their planet, the Efrosians' technological and social development was minimal. They remained in close-knit tribes, and subsisted on animals that they could bring down with stone knives and spears. Once the massive glaciers began to break, both technology and unity swiftly developed.

The most esteemed individuals of the tribes were the warrior-priests, respected not only for their prowess as warriors, but also for their abilities as great healers. The greatest of these warrior-priests was S'skotomz, who brought the entire planet under his benevolent rule, and who is still revered today. Although the warrior-priests ruled Efros as a religious oligarchy, technological development did not suffer (as it often has under religious leadership elsewhere in the galaxy). On the contrary, the warrior-priests' technology and invention would better life, preserving and furthering what was so precious to all Efrosians. As the climate warmed somewhat, the Efrosians discovered previously hidden energy and mineral resources that boosted their technological progress.

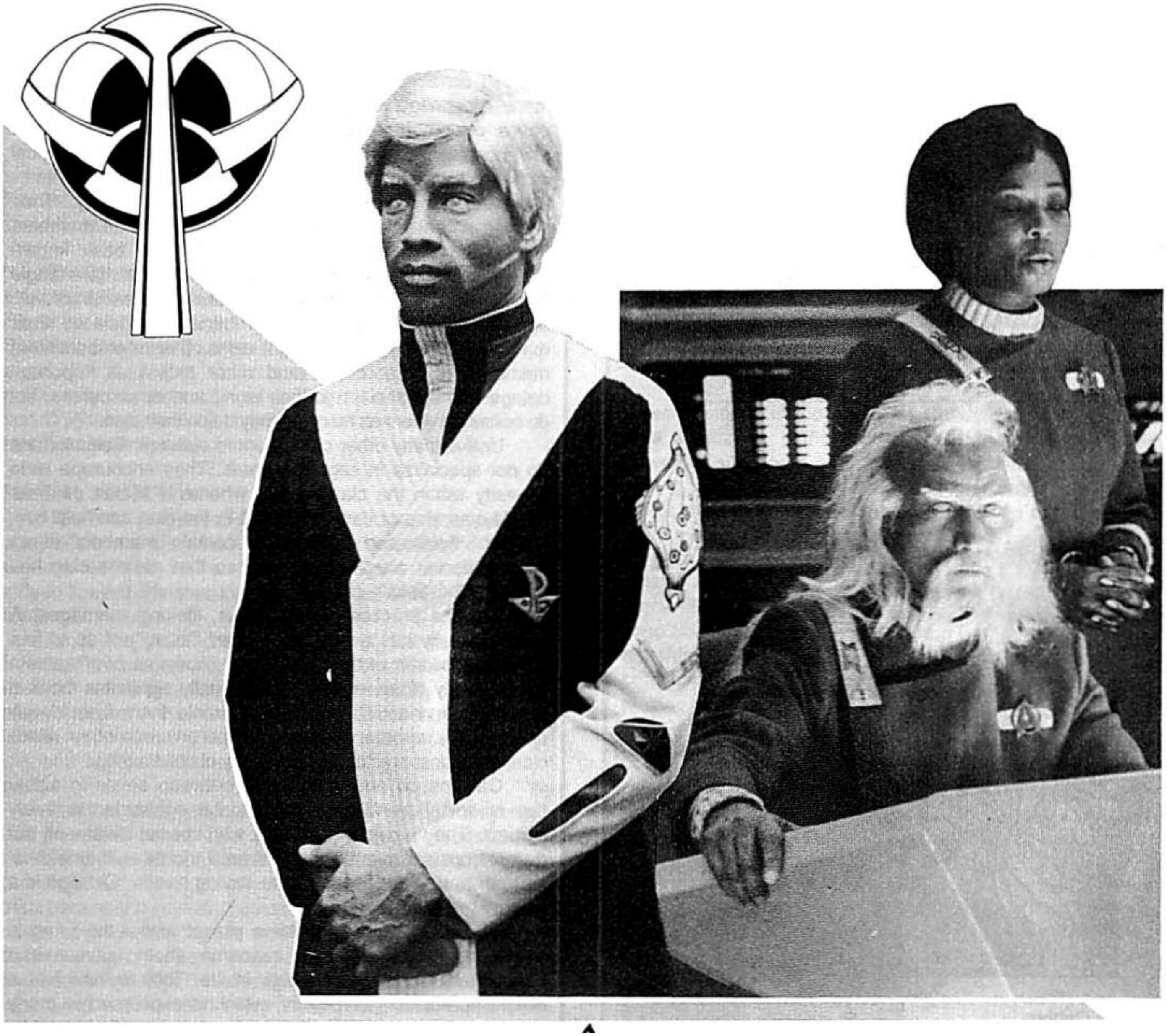
By the time the Federation discovered them, the Efrosians had developed radio telescopes and atomic power. It was the Vulcan-crewed *USS Surak* that first detected the presence of an intelligent race on Efros. The Efrosians were overjoyed to learn that there was an abundance of intelligent life in the universe, both like and unlike themselves. They accepted the Federation's offer of friendship, and joined the UFP soon afterward.

PLACE IN THE FEDERATION

Although not widely known throughout the Federation, many Efrosians live and work as teachers and philosophers on other worlds as part of cultural exchanges. Efrosians serve in Star Fleet as well, especially many of the lower-grade warrior-priests. Navigation, helm, and medicine are the most popular choices in Star Fleet for Efrosians. Warrior-priests perform excellently in medicine because of their innate, almost psychic ability to diagnose intuitively a patient's problem and treat him with minimal medicine or equipment. Because of their abilities and status, Star Fleet allows Efrosian warrior-priests serving in the medical sciences to wear their native priestly finery while on duty.

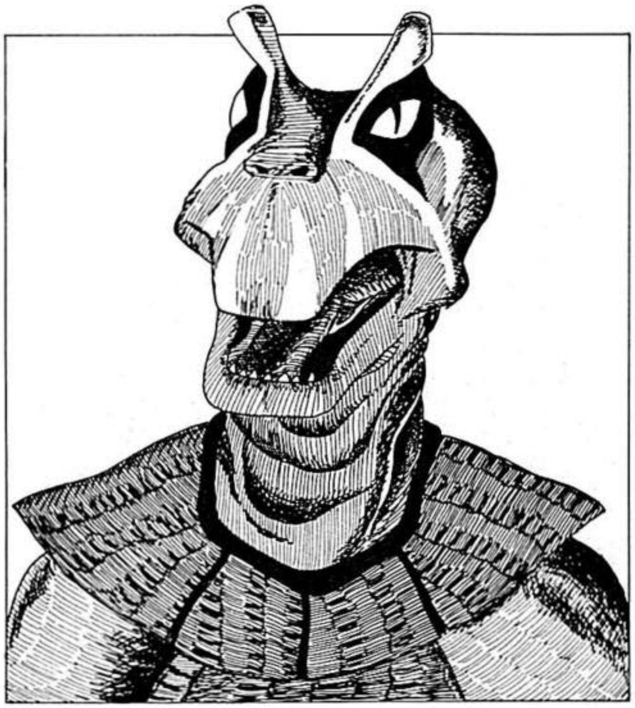
Efrosians are also very adept as navigators and helmsmen due to their highly developed sense of direction. They seem to have developed this survival mechanism to deal with their world's blinding, disorienting snowstorms; thus, Efrosians are natural navigators. They instinctively know correct courses and can make adjustments to stay on course even without the aid of a computer. Efrosians who do not choose to joint Star Fleet are often pressured to join the Merchant Academy.

The one aspect of Efrosian culture that other Federation members find annoying is the secrecy about their religion. All that is known about Efrosian faith is that it is very esoteric and mystical. Although extremely open and friendly about every other aspect of their culture, the Efrosians guard their religion jealously. They say that it was their religion that helped them survive the ravages of the ice age, and they refuse to even share its principles with others. Fortuntately, most Federation races understand and respect the need for such privacy, and the Efrosians can benignly ignore Tellarite speculation about "child-sacrifice" and "ritual murder".



KASHEETA

World Log: KASHET	
System Data	
System Name:	Isis Kash
Map Coordinates:	7.85N 0.87W
Number Of Class M Present:	3
Planetary Data	
Position In System:	II
Number Of Satellites:	3
Planetary Gravity:	0.95g
Planetary Size	
Diameter:	16,400 km
Equatorial Circumference:	51,500 km
Total Surface Area:	845,000,000 sq km
Percent Land Mass:	60%
Total Land Area:	507,000,000 sq km
Planetary Conditions	
Length Of Day:	21.5 hrs
Atmospheric Density:	Terrestrial
General Climate:	Arctic
Mineral Content	
Normal Metals:	70%
Radioactives:	10%
Gemstones:	Trace
Industrial Crystals:	10%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Kasheeta
Technological/ Sociopolitical Index:	666777-66
Planetary Trade Profile:	CCDDDCB/B (C)



PLANETARY DESCRIPTION

Kashet is a small, Terran-like planet in a dual star system that is currently experiencing an ice age. It is the home of a reptilian race that adapted to the ice age by building gigantic domed enclosures that artificially maintain tropical conditions year-round. These city centers are interconnected by mammoth underground passageways and tunnels throughout the equatorial region. Current census estimates number the city-based Kasheeta population at between six and seven million inhabitants.

RACIAL DESCRIPTION

Though the Kasheeta resemble the Gorn, they are an independently evolved race. The Kasheeta are not as warlike as the Gorn. Within the last 200 years, they have overcome their aggressive tendencies. Although female Kasheeta are notoriously arrogant and are quick to take offense at the slightest provocation, they prefer non-violent resolution to conflict.

Discovered almost eleven years ago, the Kasheeta are the newest addition to the Federation. They are roughly two-and-a-half meters tall at full adulthood. Males are distinguished by dull-green coloration, and females are predominantly bright green or reddish-green. Some Kasheeta, including the royal family, have neck scales of a bright bluish tone, which denotes (or so it is claimed) superior breeding. All Kasheeta have a bony, ridge-like structure at the base of the neck. Reputedly, this bone contains medicinal properties worth quite a few credits on various Triangle worlds.

When first introduced, a Kasheetan will seem aloof and arrogantly indifferent to outsiders, reflecting a centuries-old distrust of anyone not immediately recognizable as a friend. Despite this, Kasheetans are capable of expressing genuine friendship bordering on the obsessive. They frequently give gifts to prove their good intentions (and expect similar actions in return).

Kashet has a rigid social structure ruled by a matriarchy, the H'Jarilx dynasty. Under the direction of the Empress of the Domed Cities, Kasheetans practice a selective birth control program designed to enhance feminine qualities at the expense of less desirable males. As one might expect, all Kasheetan representatives to the Federation are female. Male Kasheetans are relegated to second-class citizenship. They provide manual and domestic labor, with little expectation of advancement within the social order. Even entrance into the elite warrior class is now reserved to the smaller, less powerful females. In some cities, it is illegal to extend basic literacy to males.

RACIAL HISTORY

Kasheetan records indicate that the planet's social order was at one time completely opposite from its present system. Roughly 300 years ago, a male-dominated tribal society controlled the planet, holding female Kasheetans in general disrespect. The planet's tribes were constantly warring among themselves for control of the shrinking farmlands and industrial bases. At this time, Kasheetan science was sufficiently developed to detect the onset of a new ice age (possibly hastened by the extended use of chemical weapons in the upper atmosphere). However, the tribal leaders ignored the evidence and elected to continue warring. When the glaciers descended upon them, threatening the race with extinction, the females staged a social revolution, overthrowing male leaders of the planet's central tribes in favor of a female-dominated order. The newly-elected matriarchy acted quickly to build an extensive network of domed cities to ensure the race's survival against the approaching ice age. However, a few tribes refused to forsake their lifestyle and accept the new social order. Hundreds of thousands of Kasheeta remained outside the domed cities, despite the deteriorating climate. Many still remain along the fringes of the planet's glaciers, adapting as best they can and occasionally mounting raids against the planet's cultural centers.

The government of Kashet centers around a matriarchy with the ruler of the planet, the Empress of the Domed Cities, at the apex. Below her, prominent family lines provide each city with a governor responsible for her city and the surrounding zones of arable territory. The governors meet monthly in the planet's capital of Io' Luth to do homage to their queen and to recommend positions for other females. The educational system is designed to maintain both the primacy of Kasheetan females as well as the cultural diversity of each city.

As the Kasheeta have a short life spans (roughly between 20 to 30 standard years), Kasheetan science deals primarily with the advancement of medicine. Of all the Federation representatives sent to Kashet, physicians and healers receive the most respect and admiration.

PLACE IN THE FEDERATION

Kashet received associate member status in the Federation within the last year. The Empress of The Domed Cities has recently concluded trade agreements with Andoian mining concerns, permitting them to extract radioactives in exchange for modern power plants and various support technologies. Several female Kasheetas from the royal family have been selected for the Star Fleet Academy. Plans are underway to house a permanent Federation delegation on Kashet within the next year, contingent on the Empress' permission to construct an astronomical research/support facility in the Isis Kash system. Additional trade concessions are expected as Kashet becomes integrated into the mainstream of Federation cultural and political concerns.

XELATIANS

World Log: XELATA	
System Data	
System Name:	Tau 56
Map Coordinates:	1.53N 6.74W
Number Of Class M Present:	2
Planetary Data	
Position In System:	3
Number Of Satellites:	1
Planetary Gravity:	.9g
Planetary Size	
Diameter:	11,654 km
Equatorial Circumference:	36,600 km
Total Surface Area:	426,700,000 sq km
Percent Land Mass:	22%
Total Land Mass:	93,870,000 sq km
Planetary Conditions	
Length Of Day:	21 hrs
Atmospheric Density:	Thick
General Climate:	Tropical
Mineral Content	
Normal Metals:	33%
Radioactives:	3%
Gemstones:	4%
Industrial Crystals:	Trace
Special Minerals:	2% (Rodinium)
Cultural Data	
Dominant Life Form:	Xelatian
Technological/ Sociopolitical Index:	889778-88
Planetary Trade Profile:	BDFDBBE/C(B)

Planetary Description

Xelata is a warm, tropical planet prone to fierce storms. These storms make life above water extremely difficult for all but the hardfiest of life forms, only shrubs, insects, and small amphibians have made their homes above sea level.

As nature was too violent above water, advanced evolution took place only below the water. However, many creatures became too specialized and died out while others reached evolutionary dead ends. Only the Xelata cephalopods, the Terran equivalent of squids and octopi, were adaptable and capable of higher evolution. After millions of years, a spieces of cephalopod developed an enlarged brain with intelligence and psionic potential. These creatures became known as Xelatians.

Racial Description

The Federation first encountered the Xelatians in Stardate 2/1805, when the *USS Audacious* peacefuly met a small, nuclear-powered Xelatian spaceship inside the Tau 56 system. Since then, the Xelatians and the Federation have conducted diplomatic meetings culminating with the appearance of a Xelatian delegation to Terra and Star Fleet Headquarters this year.

Much of what we know about the Xelatians was gathered through long and detailed conversations with members of this delegation. They also brought many books and data tapes to help us understand their civilization.

Xelatian physiology is extremely interesting. Their average torso length is about 1.2 meters and they weigh about 100 kilograms. Four meter-long arm tentacles are arranged on each side of the body halfway up the torso. On the lower end of the torso, below four gill slits, are the leg tentacles. There are extremely muscular tentacles to a side, which are used for swimming and capturing large prey in the water.

Near the crown of the torso is a large, oval-shaped eye. Used to the dim lighting of oceans, Xelatians are extremely light-sensitive and see only the cooler, ultraviolet end of the spectrum. What Humanoids consider normal lighting is much too bright for Xelatians, which is why they wear masks. This mask also shines a passive ultraviolet beam through the single eye slit, heightening the Xelatian's vision and giving off ghostly, pale-blue light.

Communications with the Xelatians must be conducted through universal translators as the Xelatians cannot speak Galacta yet. They communicate among themselves through telepathy and the use of bioluminescent pigmentation on their skin. This 'speech' is comparable to an ever-changing intricate mosaic of multicolored lights. Despite this, they have a truly amazing abilitry to learn languages, and they can now read and write Galacta. They are currently trying to learn to speak through their nasal slits, as their mouth is used for digestion only.

Even though the Xelatians' extensive skeletal framework can support their bodies in high gravities, they have no means of locomotion on land. To overcome this, Xelatians wear a sophisticated anti-grav harness. Over their bodies, they wear a thick robe specially tailored to give a vaguly humanoid appearance. Actually modified environmental suits, these robes are designed to trap moisture close to the Xelatian's skin. A pump and tank arrangement circulates Xelatian water through special oxygen-permeable sponges inserted into each gill slit so that they can survive out of water. Perched upon the head of each Xelatian is what appears to be a scruffy wig, which is actually Xelatian sea grass. Room air is drawn through the moist clump of vegetation to humidify and scent the otherwise offensive smelling air. On the average, a Xeltian can remain out of his environment for about 7 hours before he must immerse himself in sea water. Xelatians have found Terra's oceans to be extremely pleasurable.

Racial History

Xelatian history is remarkable for its peacefulness. Throughout their history, there have been only two major incidents of public turmoil.

One of the roadblocks to Xelatian progress was the development of effective tools in the difficult, buoyant environment. After basic tools were established, complex machinery soon followed, and the Xelatians quickly began to exploit their environment. Great undersea mining operations, huge fission power plants, and the almost non-stop smelting of metals thoroughly polluted the Xelatian environment. Socially, the idea of a communal bond lessened as individuals became enamored with the concept of wealth.

This turmoil brought about what the Xelatians call "The Reclaimatian". Gatherings of the common citizenry turned into riots as pollution levels kept increasing. A few of the egg nurseries had already been contaminated, and the food plants were also suffering. These riots culminated in a mass storming of the major industries. They overwhelmed those running the various facilities and shut Xelatian industry down until industrial leaders found proper means to contain the pollution and took measures to reclaim the damaged areas of the oceans.

After Xelatian industry resumed, emphasis was placed on finding a non-toxic way of producting energy. Unlike most humanoid cultures, the Xelatians discovered the principles of anti-gravity before developing fusion reactors. With this discovery, Xelatian scientist, realized that it was possible for them to leave the oceans.

This revelation caused the Xelatians' second turmoil. A vast majority felt that leaving the oceans would have a detrimental effect on their communal consciousness. They believed that those who left the water would go insane for lack of the communal touch. All research into the use of anti-gravity for anything but lifing heavy objects was banned. About a hundred years later, when Xelatian scientists developed nuclear power, they realized that they now possessed the ability to leave not only their oceans, but their world as well.

Regarding the ban on travel as an intolerable stupidity, a group of scientists secretly began building a small spaceship. When the rest of the community caught onto the scheme, they came en masse to stop the affair, killing many of the scientists protecting the ship. In the confusion, one Xelatian scientist climbed into the ship and blasted off. Though only partially finished, the ship rose above the ocean and moved into the upper reaches of the planet's atmosphere. However, the ship could not attain orbit, and when it crashed in the waters, the first Xelatian astronaut was near death.

Contrary to his expectations, the dying scientist was hailed as a hero. All the dire predictions about the lessening of the communal consciousness were proven wrong with his voyage. For as he ventured above the oceans, the entire population could feel his excitement at seeing all the things laying beyond the water's edge. The Xelatians then threw their support behind efforts to explore their world and beyond.

Place in the Federation

Negotiantions to admit the Xelatians to the Federation are proceeding quite well. During their visit to Terra, the Xelatians have shown considerable political savvy and a wry sense of humor that manages to come across the universal translator. The Federation Council has given the Xelatian diplomats the full range of political courtesies possessed by all representatives of members worlds, including the right to participate in meetings of the Council. The Xelatian delegation has used these privileges to the utmost, attending as many functions as possible, and impressing many with their curiosity and charm.

There has been one instance when the charm of the Xelatian diplomats failed them. Upon meeting Th'velth, the ambassador from Andor, they appeared quite distraught. After regaining their composure, they apologized profusely to the perturbed ambassador, saying that he greatly resembled a race of aggressive beings who once appeared on Xelata. This bit of news has excited the usually stoic Andorian people. Now, ship after ship in the Blue Fleet is petitioning Galaxy Exploration Command to allow them to explore the Rimward Sector.

The Federation is quite eager to admit the Xelatians. Some believe that they would be a welcome addition to the aquatic branch of Star Fleet Marines, while others feel that the Xelatians' political prowess would make them excellent diplomats. Their appearance would be a definite plus when dealing with non-humanoid races.

Perhaps the most important advantage in admitting the Xelatians would be strategic. Gaining the Tau 56 system would give Star Fleet a flanking position on the secretive Tholians. The Xelatians have never encountered the Tholians, but they have lost a few deep-space probes to mysterious circumstances.

However they participate, the Xelatians promise to be a vital addition to the Federation. The Xelatians themselves are extremely eager to "be one with the vast Federation". Their infectious sense of adventure is refreshing to those who have become jaded to the universe's many wonders.

ZARANITES

World Log: ZARAN II

System Data	
System Name:	Byrdica
Map Coordinates:	1.64S 6.67E
Number Of Class M Present:	1
Planetary Data	
Position In System:	II
Number Of Satellites:	1
Planetary Gravity:	1.4 g
Planetary Size	
Diameter:	16,990 km
Equatorial Circumference:	52,200 km
Total Surface Area:	663,500,000 sq km
Percent Land Mass:	45%
Total Land Mass:	298,575,000 sq km
Planetary Conditions	
Length Of Day:	28 hrs
Atmospheric Density:	Thin
General Climate:	Desert
Mineral Content	
Normal Metals:	20%
Radioactives:	38%
Gemstones:	8%
Industrial Crystals:	14%
Special Minerals:	Trace
Cultural Data	
Dominant Life Form:	Zaranite
Technological/ Sociopolitical Index:	999876-98
Planetary Trade Profile:	DCDDDCB/B(B)

PLANETARY DESCRIPTION

The planet Zaran possesses an odd contrast of environments. Its deep sea beds remain frozen except during the summer months, when some surface ice does melt. Rising far above the seas are the desert-like plateaus and buttes where Zaranite civilization is centered.

There is little plant and animal life on the world, but there are wonderous species nonetheless. Most of the dominant species are reptilian. Giant winged lizards called *Raldos* nest in the cliffs of the plataus, and *Volpas*, or sand snakes, move like sharks under the sands of the vast deserts.

The seas are dark, as the high plateaus prevent sunlight from reaching them. Little lives in the frozen blackness, and only a few mammals are known to tunnel in the glacial seas. Chemicals from within the planet have contaminated several of these seas, further discouraging life from evolving there.

Many offworlders find it difficult to deal with Zaran's thin air. The Federation embassy on Zaran is usually staffed by races accustomed to thin atmospheres, but those who are not acclimated consider duty in the Zaran Embassy as some sort of punishment.

RACIAL DESCRIPTION

The Zaranites are a very militaristic and ritual-observing people. In their first encounter with the Federation, they attacked first, and when they discovered that they could not win, they surrendered. Such is the way that they have dealt with life on their planet.

Most individuals see Zaranites only when they are masked and protected. They have dark skin with long, stringy black hair, deep-set eyes, and narrow fingers. When out of their native environment, they wear a fully protective suit that covers their narrow bodies and provides them with filtering system to breathe air. The suit also holds in several of the rare Beega insects from Zaran. These insects inhabit the surface of the Zaranite's skin, often attaching themselves to nerve endings. Once there, they dissipate stress and cause pleasant feeling of relaxation. Unfortunately, the insects area killed when removed from the thin atmosphere on Zaran; thus, the suit is worn to keep them alive. Virtually every Zaranite family raises Beega insects, which can fetch handsome prices on some Federation worlds.

The languages used on Zaran are difficult for even the best Federation scholars to master. Each family seems to use their own variant of the base language, Zaraneese. It takes skilled use of a universal translator to make out all the forms of the Zaranite languages. This linguistic complexity has helped Zaranite society remain a mystery to most Federation members, and the Zaranites are more than happy to keep it that way.

Zaranite tradition is linked deeply with a series of books called the *Casaval*, which deal with the rituals of life and progressive aging of the Zaranite race. These rituals begin with violent, aggressive activity and finish with calm passivity. The purpose of these rituals is to attempt to reach the stars, paralleling the Romulan Road to the Stars in some respects. Scholars who have looked into the *Casaval* have found it to be long and difficult to understand. It is very rare to find a Zaranite who is not carrying one of the 13 volumes of the *Casaval*.

RACIAL HISTORY

First contact with the Zaranites came on Stardate 1/9302.23, when the Galaxy Exploration Command vessel *USS Clandre* entered the Byrdica system and discovered a Zaranite vesel in orbit around Zaran II. Subsequently, the Zaranites ordered the *Clandre* to surrender. Captain Jerry Harvardson of the *Clandre* denied surrender and offered them the opportunity to join the Federation. The Zaranite ship responded by firing its lasers on the *Clandre*, which raised its shields and held fire. For nearly three hours, the Zaranite vessel pounded the Federation ship, but Captain Harvardson did not return fire, despite some damage to his ship's engines. Finally, the Zaranites ceased their bombardment and contacted the *Clandre*, offering to discuss opening diplomatic channels with the Federation. Zaran was eventually admitted to the Federation in Stardate 1/9307.01, just before the Four Years War began.

With the outbreak of the Four Years War, Zaranite industry geared up to produce military hardware. The Zaranites became skilled manufacturers of laser arms, and soon reached the technological level of advanced Federation worlds.

PLACE IN THE FEDERATION

Membership in the United Federation of Planets has caused a great deal of growth for the Zaranites, financially as well as culturally. In Stardate 2/1001, the first Zaranite graduated from Star Fleet Academy, and presently, there are several dozen Zaranite officers in the Star Fleet. Without exception, they are involved in weapons technology or engineering, and prefer combat or potential combat roles.

Politically, the Zaranites have been a major driving force behind several legislative programs, especially in the area of cultural exchange. They have proven themselves to be shrewd politicians. Their protective suits conceal their expressions, making them dangerous debaters in the political arena.

The weapons business on Zaran has had some difficult times but is improving. The invention of the phaser and photon weapons systems almost bankrupted the laser industries of Zaran. However, the Federation Council voted to loan the planet massive funds to upgrade its weapons facilities to produce shipboard phasers. This loan has caused a great deal of controversy in industrial circles, where manufacturers resent the interference of the Council and believe such 'favoritism' will be the death of free enterprise.

Some Federation politicians believe that the Zaranites are growing too fast and becoming too powerful. Some see a connection between the fact that a Zaranite heads the Department of Finance and that many large contracts seem to end up assigned to Zaran or Zaranite-owned companies. Of course, this distrust is probably no more than jealousy of the Zaranites' massive industrial base.

The goals of this race seem to be tied in with the *Casaval* and are difficult to unravel. Though the Zaranites are very curious about the universe around them, they do not wish to share their beliefs with any race or creature. Politically, they are tough opponents and powerful allies.

SKORR

STR +5 END −5 INT normal DEX +5
CHA normal LUC −15 PSI −30
AP = (DEX/10) + 4 SOC/TECH INDEX 6-878773

An ancient warrior race, now turned toward peace. This race has bird-like ancestry, and still possesses functional wings and talons. (Flight in manuever situations moves 4 squares per AP expended, with 2 AP cost to take off. During straight-line flight at altitude, that speed increases to a maximum of 5 times maneuver speed. Talons do 1D10 + 5 damage in HTH combat.

Tchar: STR 79 END 60 INT 63 DEX 82
CHA 71 LUC 19 PSI 01

Significant Skills:	Leadership	82
	Pers Cmbt (unarmed)	69
	Zero-G Operations	35

REPTILIANS

STR +25 END +20 INT normal DEX −10
CHA −5 LUC −30 PSI −30
AP = (DEX/10) + 2 SOC/TECH INDEX 7-667651
ARMOR 4 points

The planet Sord's people come from is never mentioned, but they are known colloquially as "reptilians". They are probably distant cousins of the Gorn, though they are smaller in size (about 6 1/2 ft. tall for the average adult). They resemble dinosaurs, possessing a tough skin and striking golden eyes.

Sord: STR 107 END 98 INT 69 DEX 35
CHA 65 LUC 42 PSI 01

Significant Skills:	Pers Cmbt (unarmed)	79
	Streetwise	81
	Planetary Survival	63

CILIATES

STR 15 END 15 INT normal DEX +25
CHA −5 LUC −10 PSI −30
AP = (DEX/10) + 6 SOC/TECH INDEX 7-877762

Em/3/Green's home world isn't revealed either, but his people are popularly known as "ciliates" because they have rows of three arm-like cilia along each side of the body which are used as extremely delicate manipulatory organs. They walk upright on short, stumpy legs, and are a bright green in color with a perpetually sad expression. The ciliates are, as a race, cowardly. They will avoid physical danger wherever possible. This does not mean they will turn tail and run at every provocation; they are not unreasoning in their fear. They will, however, avoid danger whenever possible, though they are capable of accepting it (albeit not very gracefully) when danger is unavoidable. Ciliates have six very flexible and sensitive arm-like cilia which they can use all at once and with no worries about "handedness" or reduction in dexterity. Their eyesight is also particularly good, especially when manipulating small objects. Thus, they make excellent mechanics, jewelers, and craftsmen.

Em/3/Green:
STR 29 END 32 INT 71 DEX 104
CHA 45 LUC 53 PSI 40

Significant Skills:	Lockpicking	84
	Electronics Tech	88
	Pickpocket	77
	Pers Cmbt (unarmed)	01
	Ground Vehicle Op	78

VEDALA

STR –10 END –20 INT +20
DEX normal CHA +10 LUC –5
PSI normal
AP = (DEX/10) + 4
SOC/TECH INDEX 0-CB9A8B

The Vedala are a cat-like people who walk upright with sort of a stoop-shouldered appearance. Despite their unassuming physical appearance, they seem to radiate a wisdom only great age can produce in a race. They are the oldest known spacefaring race in the galaxy, beginning their explorations while mankind on Earth was still living in caves. As such, they are one of the rare examples of a culture that is technologically superior to the Federation.

Though the Vedala have always been on friendly terms with humans and most other spacegoing species, they have an overwhelming need for both personal and racial privacy. (So much so that asking any personal question of a Vedala, even his/her name, is a grave insult.) Thus, they rarely contact other beings, and even on those rare occasions, only one Vedala at a time has ever been seen. Their home planet is unknown even to them – they now live on many widely-scattered, artificially-maintained asteroids (equipped with advanced Vedala stardrives) that they use to wander the galaxy.

The Vedala are never encountered unless they wish to be, and they can command the instant attention of most any government just by requesting it. Not only the Federation, but the Klingons have been known to have responded at times to Vedala requests of one sort or another. Their advanced technology remains a mystery, but it is formidable enough that no existing power – no matter how expansionistic – would want to bother them. No Vedala asteroid has ever been attacked, as far as Federation records can reveal. No Vedala has ever been known to use or carry a weapon. Even so, they are quite capable of protecting themselves, and all races in the galaxy know this quite well.

The Vedala individual who calls Kirk, Spock, and the others together in “The Jihad” is never identified (naturally), and is not observed under conditions that allow reasonable speculation on her skills or specific attributes.

The final member of the party, Lora, is a normal human female. Her statistics and significant skills are listed below:

Lora: STR 68 END 79 INT 73
DEX 82 CHA 77 LUC 76 PSI 51

Significant Skills:

Marks (modern)	82
Pers Cmbt (unarmed)	77
Planetary Survival	73
Hunting	91
Tracking	99

There are a number of ways these non-player character races could be worked into a campaign. The most straightforward would be to have the team called back together by the Vedala, either to again thwart the war-like efforts of prince Tchar, or perhaps teamed up with a rehabilitated Tchar against some other galaxy-spanning problem.

The individuals from the expedition may be encountered on their own. The little lockpick Em/3/Green may be mixed up in some sort of spectacular theft planned by a mastermind. Lora may seek out Captain Kirk (who she “took a fancy to” during the original quest) to ask for his help or just to take up where she left off. Sord may be working as a bodyguard or expedition leader somewhere. Tchar, now cured of his madness, may want to make amends by giving Kirk some important information. And, of course, the Vedala may call on Kirk and Spock, or other Star Fleet officers, for another important cause.

Finally, other members of the races represented in the original expedition may turn up as non-player characters in any campaign. A reptilian mercenary band, a ciliate repairman, or a Skorr diplomat might be interesting as important non-player characters, or just walk-ons.

None of these four new races are intended as player characters, and none would be found in Star Fleet. A race known as the Aurelians, close relatives of the Skorr, MIGHT be found as Star Fleet officers, however. (An Aurelian historian was shown in the animated episode “Yesteryear”.) The Aurelians have slightly different racial characteristic adjustments and background than the Skorr. We will present the Aurelians as an optional seventh Star Fleet character race in this column next month, including complete background and character creation data for Aurelian player characters. Meanwhile, have fun with these four new non-player character races. ■

SELECTED PERSONALITIES

The following section gives brief biographical information on individuals who, for better or worse, have left their imprint on Federation history. The entries were selected from Mixal Corodomondin's *Who's Who In The Federation, Past And Present*, Stardate 2/1402, and are used here with permission.

Name: **COCHRANE, Zephram Edark**
Rank/Title: Scientist
Position: President of Driticus University, Alpha Centauri

Race: Alpha Centauri
Age: Deceased
Sex: Male

Attributes:

STR – 45
END – 49
INT – 69
DEX – 58
CHA – 47
LUC – 50
PSI – 29

Significant Skills	**Rating**
Administration	39
Computer Operation	58
Computer Technology	48
Electronics Technology	49
Mechanical Engineering	90
Physical Sciences	
Mathematics	86
3-D Geometry	68
Physics	78
Small Vessel Engineering	44
Small Vessel Piloting	49
Small Equipment Systems Operation	55
Medical Science	
Psychology, Alpha Centauran	48
Space Sciences	
Astrogation	64
Astronomy	75
Astrophysics	77
Warp Drive Technology	98 *

Distinguishing Physical Characteristics:

Cochrane was tall and muscular, with finely chiselled features. He definitely did not look like a typical scientist.

Brief Personal History:

Birthplace: Lurivala, Alpha Centauri.

Zephram Cochrane will be remembered throughout Federation history as the inventor of the warp drive system, enabling Alpha Centaurans and Humans to explore and colonize the galaxy surrounding them. Following the experimental success of his theories, Cochrane was immediately hailed as hero of the day. Similar displays of well-earned respect were showered on him during his brief visit to Terra. A quiet and unassuming individual, Cochrane showed calm and reserve in accepting the honors.

Returning to Alpha Centauri, Cochrane served as chief warp technology consultant for the Alpha Centauri Concordium of Planets until age 52, when he became president of Driticus University. During his later years, Cochrane became increasingly absorbed with interstellar navigation and piloting as an escape from the drudgery of academic administration.

At the age of 68, shortly before his retirement from Driticus University, Cochrane purchased a small interstellar transport to make one last journey to Terra. Shortly after his departure, communication with Cochrane's craft was lost, and he was never heard from again. Presumably, he died in interstellar space, though his body has never been found.

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* As a GM, Zef may have had a 98 in his day, but as McCoy phrased it, 'relic' best describes Zefram in the 23rd century.

Therefore had he returned to society, this skill and others would be highly degraded not only for their antiquity, but also for their rustiness, being so long out of practice.

As Zef can never be used in any game other than as a hologram, the point is relatively moot.

However, should you the GM, or player, devise a similar Rip Van Winkle scenario, do keep skill degredation in mind.
Captain Chirstopher of the USAF ~1960's poses a similar tale, when Kirk not unkindly posits he'd be 'useless' in society.
-JackPhoton

Name: DAYSTROM, Richard, Ph.D.
Rank/Title: Professor Emeritus
Position: Chief Science Advisor,
Daystrom Data Concepts

Race: Human
Age: 49
Sex: Male

Attributes:

STR – 52
END – 44
INT – 85
DEX – 46
CHA – 57
LUC – 47
PSI – 12

Combat Statistics:

To-Hit Numbers–
Modern: 23
HTH: 26

Bare-Hand Damage: 1D10+2
AP: 8

Significant Skills	**Rating**
Administration	38
Computer Operation	86
Computer Technology	92
Electronics Technology	86
Physical Sciences	
Computer Science	96
Mathematics	59
Physics	48
Mechanical Engineering	55
Medical Sciences, Psychology, Human	68
Small Equipment Systems Technology	55

Distinguishing Physical Characteristics:
Daystrom is tall and slender, with fiery eyes.

Brief Personal History:
Birthplace: New Orleans, Terra.

A true genius, Dr. Richard Daystrom exemplifies the best and the worst of Federation scientists over the last century. For the last 30 years, he has been the acknowledged leader in the field of computer science and technology. Dr. Daystrom produced the first practical mathematical study on the relationship between sub-atomic structure and data processing (now called duotronics) in Stardate 1/56 at the age of ten. Daystrom later shared the Nobel Prize with Dr. William Abramson in Stardate 1/7200 for the development of the universal translator. His pioneering work in duotronics was later supplemented by various Cygnian researchers, and represents state-of-the-art computer technology.

An overachiever and compulsive workaholic, Daystrom conducted research into the practical development of a higher-order computer with artificial intelligence capabilities. After two decades of research and development (funded by Star Fleet appropriations), he completed the M-5 multitronic unit in Stardate 1/8602. However, the strain of the last few years, combined with design flaws in the M-5, plunged him into mental breakdown.

Upon recovery, Daystrom retired to New Orleans to found Daystrom Data Concepts, a corporate think-tank, to expedite further research into multitronics and to reap commercial success from improvements on his previous work. This firm is now headed by his son Richard Daystrom II, although Dr. Daystrom continues to serve as chief science advisor.

Personality:
Motivations/Desires/Goals:

Daystrom is no longer obsessed with the need to prove his genius to the universe. He is now determined to spend the rest of his career assisting other, younger computer scientists accomplish what he was not able to do—construct a truly independent, logical thinking machine.

Manner:

Daystrom is rather quiet and reserved.

Special Knowlwdge/Powers:
None.

Name: GARTH, Kelvar
Rank/Title: Fleet Captain, Retired
Position: None

Race: Izaran
Age: 62
Sex: Male

Attributes:

STR – 68 CHA – 79
END – 42 LUC – 49
INT – 78 PSI – 12
DEX – 50

Combat Statistics:

To-Hit Numbers— Bare-Hand Damage: 1D10+3
Modern: 68 AP: 9
HTH: 54

Significant Skills	Rating
Administration	36
Computer Operation	38
Computer Technology	33
Electronics Technology	59
Language, Klingonaase	82
Leadership	77
Marksmanship, Modern	68
Medical Sciences	
General Medicine, Human	28
Psychology, Human	68
Psychology, Klingon	58
Personal Combat, Unarmed	58
Personal Weapons Technology	12
Negotiation/Diplomacy	36
Shuttlecraft Pilot	40
Small Unit Tactics	87
Small Vessel Engineering	48
Social Sciences	
Federation Racial Culture/History	48
Federation Law	44
Klingon Racial Culture/History	47
Space Sciences	
Astrogation	38
Astronomy	53
Astrophysics	44
Starship Helm Operation	55
Starship Sensors	68
Starship Combat Strategy/Tactics	88
Transporter Operation Procedures	33
Transporter Technology	30
Warp Drive Technology	56

Distinguishing Physical Characteristics:

Garth has steel-gray hair brushed straight back in the classic Izaran style. He has numerous scars and burns from injuries suffered during the Battles of Axanar.

Brief Personal History:

Birthplace: Trelemarcas, Izar.
Star Fleet Medal of Valor
Karagite Order of Heroism
Terran Medal of Honor
Andor Cluster of Conspicuous Gallantry

The leading graduate of Star Fleet Academy, class of 1/85, Garth rose to become the leading Star Fleet tactician and military expert during the Four Years War. His victories over two Klingon task forces in the Axanar star system prevented the Klingons from establishing supply lines into the heart of the Federation. Though unknown at the time, Garth received several head injuries during these battles that would eventually cause acute mental disorders.

After the Four Years War, Garth was promoted to the rank of Fleet Captain in charge of *Constitution* Class vessels, replacing Captain Christopher Pike, and was awarded Star Fleet's highest commendations. He later received command of the *USS Lexington.* While serving as a diplomatic representative of the Federation to the planet Antos, a power plant on the planet's surface exploded, burning and disfiguring him. In the aftermath of the tragedy, Antosian experts managed to restore much of Garth's damaged tissue. During this time, Garth learned the Antosian secret of molecular metamorphosis, allowing him to alter his shape and form at will. Unfortunately, the accident accelerated Garth's mental collapse. The Captain's resulting paranoia and megalomania almost caused the destruction of the Antosian people when Garth attempted to use the *Lexington*'s firepower to destroy his benefactors.

Garth was thereafter committed to the Federation Penal Colony on Elba II. After several years, new and revolutionary serums for treating mental disorders reversed his psychic deterioration. Eventually rehabilitated and discharged, Garth was given a seat on the Star Fleet Operating Forces Board. He has since retired from Star Fleet and returned to Izar, where he enjoys the respect he deserves as Star Fleet's finest officer.

Personality:

Motivations/Desires/Goals:

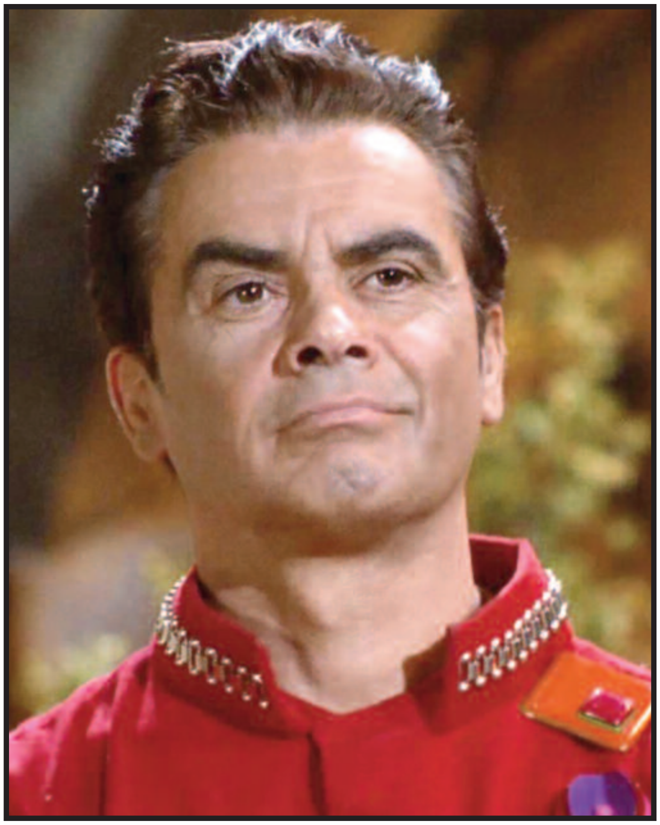
Aside from an occasional lecture at Star Fleet Academy, Garth is content to live out his life on his home planet. He is satisfied that his contributions to the Federation have been recognized and that his military tactics are required reading at the academy.

Manner:

Garth is humble and reserved. He does not flaunt his past exploits, remembering all too well the near disaster on Antos.

Special Knowledge/Powers:

Garth has learned the Antosian's secret to cellular metamorphosis, which allows him to alter the physical makeup of his body at will for limited periods of time.



Name: **GREEN, Edward Featherstone**
Rank/Title: Colonel, United Nations Armed Forces
Position: Rebel Leader

Race: Human
Age: Deceased
Sex: Male

Attributes:

STR – 47
END – 55
INT – 56
DEX – 42
CHA – 57
LUC – 40
PSI – 04

Significant Skills	**Rating**
Computer Operation	28
Electronics Technology	46
Leadership	76
Negotiation/Diplomacy	41
Small Equipment Systems Technology	38
Small Unit Tactics	57
Small Vessel Engineering	37
Small Vessel Piloting	43
Social Sciences, Terran History	44
Space Sciences	
Astronomy	32
Astrophysics	22

Distinguishing Physical Characteristics:

Green has magnetic eyes, and wears his black hair slicked back.

Brief Personal History:

Birthplace: Paris, France, Terra.

Colonel Green is one of the most insidious leaders in Terra's long and troubled history. In Stardate 0/35, at the height of his military career, Green led a revolt against the Terran government to force its leaders to discontinue space exploration. Gaining control of the Luna military defense base, he destroyed the first fusion reactor-driven prototype vessel. Thereafter, he threatened to use Terra's remaining stockpile of nuclear weapons against selected population centers if his demands were not met. A UN task force succeeded in recapturing Luna Base, but not before Green managed to launch several nuclear missiles, incinerating two major metropolitan centers with millions of casualties. Escaping capture when Luna Base fell, Green returned to Terra, where he and his supporters conducted numerous terrorist activities in what became known as Colonel Green's War. After concerted efforts yielding over a million casualties, Colonel Green and his supporters were hunted down and killed in a missile barrage on their island fortress near Singapore.

In the last century, Colonel Green has come to be revered by supporters of the Back-to-Earth movement, and the leaders of the Terra-Return League made him a representative of their cause.

Name: **JONES, Cyrano**
Rank/Title: Merchant Captain
Position: Independent Trader

Race: Human
Age: 48
Sex: Male

Attributes:

STR – 42 CHA – 39
END – 45 LUC – 48
INT – 49 PSI – 07
DEX – 56

Combat Statistics:

To-Hit Numbers—
Modern: 38
HTH: 32

Bare-Hand Damage: 1D10+2
AP: 9

Significant Skills	Rating
Administration	10
Computer Operation	22
Electrical Engineering	34
Languages:	
Klingonaase	15
Orion	12
Marksmanship, Modern	20
Mechanical Engineering	28
Personal Combat, Unarmed	22
Social Science, Federation Law	30
Small Vessel Engineering	28
Small Vessel Piloting	40
Space Sciences	
Astronomy	21
Astrophysics	10
Trade and Commerce	44
Value Estimation	55

Distinguishing Physical Characteristics:

Cyrano is a short, pudgy man with apple cheeks and a mop of gray hair.

Brief Personal History:

Birthplace: Deneva

Cyrano Jones has spent his entire life in space, acting as an independent trader and speculator among the numerous worlds near the Organian Neutral Zone. Typically staying just one step ahead of financial ruin, Cyrano is one of many free-spirited adventurers who ply the space lanes, ever eager to make a quick (though honest) profit.

Personality:

Motivations/Desires/Goals:

Cyrano has an adopted daughter, Hellena, whom he supports as best he can. His lifelong dream is to make an immensely profitable business deal that would enable him to retire and spend the rest of his life with her on Deneva. He loves her more than anything else in life.

Manner:

In hopes of getting a better deal for himself, Cyrano pretends to be a buffoon. Warm and friendly when he chooses to be, Cyrano is usually gregarious, outspoken, and eager to convince others of his sincerity and goodwill.

Special Knowledge/Powers:

None.

JONES, Cyrano / Human, male / Age 46
Space trader and independent scout.
STR 41 END 32 INT 62 DEX 42 CHA 88
LUC 02 PSI 17
Significant skills: Carousing 87
Federation Law 32
Negotiation/diplomacy 77
Small Vessel Piloting 61
* Trade and Commerce 89

Name: **MUDD, Harcourt Fenton (Harry)**
Rank/Title: Independent Adventurer
Position: Con Artist

Race: Human
Age: 46
Sex: Male

Attributes:

STR – 52
END – 55
INT – 58
DEX – 60
CHA – 57
LUC – 39
PSI – 04

Combat Statistics:

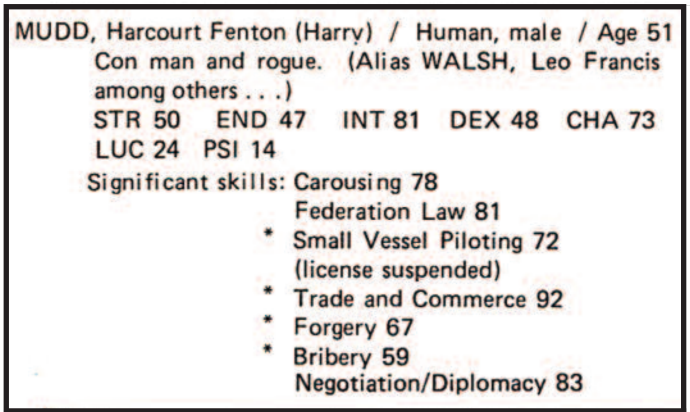
To-Hit Numbers—
Modern: 45
HTH: 47

Bare-Hand Damage: 2D10+2
AP: 10

Significant Skills	**Rating**
Bribery	55
Carousing	58
Computer Operation	22
Electronics Technology	13
Forgery	66
Gaming	92
Language, Orion	57
Marksmanship, Modern	30
Personal Combat, Armed	22
Small Vessel Engineering	16
Small Vessel Piloting	43
Space Sciences	
Astronomy	41
Astrophysics	12

Distinguishing Physical Characteristics:

A rotund, balding man, Harry has a distinctive black handlebar mustache.



MUDD, Harcourt Fenton (Harry) / Human, male / Age 51
Con man and rogue. (Alias WALSH, Leo Francis among others . . .)
STR 50 END 47 INT 81 DEX 48 CHA 73
LUC 24 PSI 14
Significant skills: Carousing 78
Federation Law 81
* Small Vessel Piloting 72
(license suspended)
* Trade and Commerce 92
* Forgery 67
* Bribery 59
Negotiation/Diplomacy 83

Brief Personal History:

Birthplace: St. Louis, Terra.

Harry Mudd has spent his entire life convinced that it is unreasonable to invest an honest day's work into anything when he can get someone else to do it for him. Harry is without doubt the finest con man in Federation history, although his greed and ego often upset his plans. He has avoided incarceration by slim margins on more than one occasion. Recently, Harry managed to stumble upon the planet that has since been christened Mudd's World. There, he discovered the remains of an advanced android culture. When members of Star Fleet caught up with him, they sentenced him to remain on Mudd's World under the supervision of the android population until he became socially rehabilitated. Later, he escaped from the planet and resumed his con games. Elements from Star Fleet recaptured him while he was selling fake love potions to miners, and Mudd was sent away for rehabilitation once more.

Personality:

Motivations/Desires/Goals:

Harry Mudd began his career of larceny and deception to get away from his shrew of a wife. His insatiable ego and desire for bigger and better con jobs keep him quite busy.

Manner:

Not a bad sort as most of his profession go, Harry is nevertheless self-centered and given to manipulating others for his personal advantage.

Special Knowledge/Powers:

None.

Name: SAREK
Rank/Title: Ambassador
Position: Director of Vulcan Science Academy

Race: Vulcan
Age: 117
Sex: Male

Attributes:

STR	– 77	CHA	– 57
END	– 49	LUC	– 50
INT	– 79	PSI	– 78
DEX	– 44		

Combat Statistics:
To-Hit Numbers—
Modern: 48
HTH: 38
Bare-Hand Damage: 2D10+2
AP: 8

Significant Skills	**Rating**
Administration	57
Computer Operation	58
Computer Technology	77
Leadership	88
Negotiation/Diplomacy	85
Physical Sciences	
Computer Science	85
Mathematics	88
Physics	55

Distinguishing Physical Characteristics:
Sarek has a stocky build and a hawk nose.

Brief Personal History:
Birthplace: Remsusala, Vulcan.

Sarek first gained political prominence with his stirring defense of Star Fleet Command after the disastrous Scandal of Archimedes. He openly challenged the Tellarite ambassador Gafhf's demand to reduce the size of Star Fleet to prevent misuse of its resources. Although Sarek personally dislikes diverting men and money from scientific into military avenues, his defense of Star Fleet helped avert serious cutbacks in Star Fleet's budget. During the Babel Conference of Stardate 2/09, Sarek persuaded the Federation delegates to make the planet Coridan a UFP protectorate.

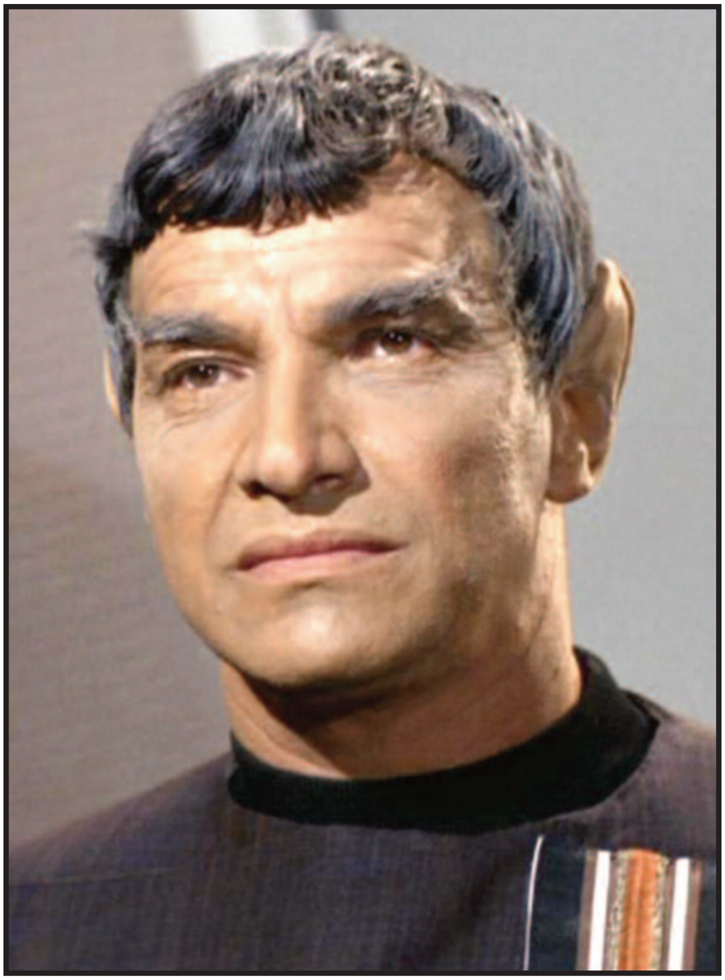
Due to his near-fatal heart attack prior to the Babel Conference, Sarek returned to Vulcan. In addition to his post as Ambassadorial Representative to the Federation, he took up the position of Director of the Vulcan Science Academy. Using these two positions to his advantage, Sarek continues to influence Federation policy while enjoying (insofar as a Vulcan can "enjoy" anything) a well-deserved semi-retirement.

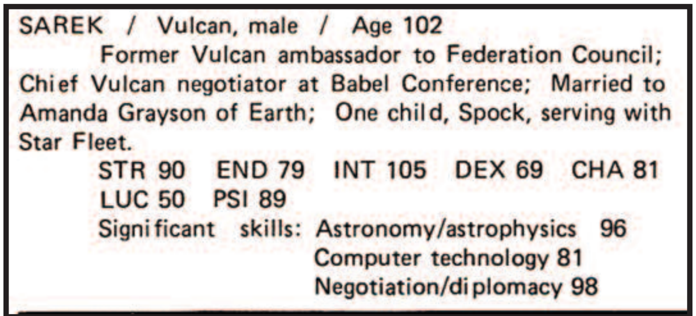
Personality:
Motivations/Desires/Goals:

A calm, rational individual with strong family loyalties, Sarek is a model Vulcan citizen. He exemplifies the proper application of logic and reasoning in place of emotion in political, personal, and private matters.

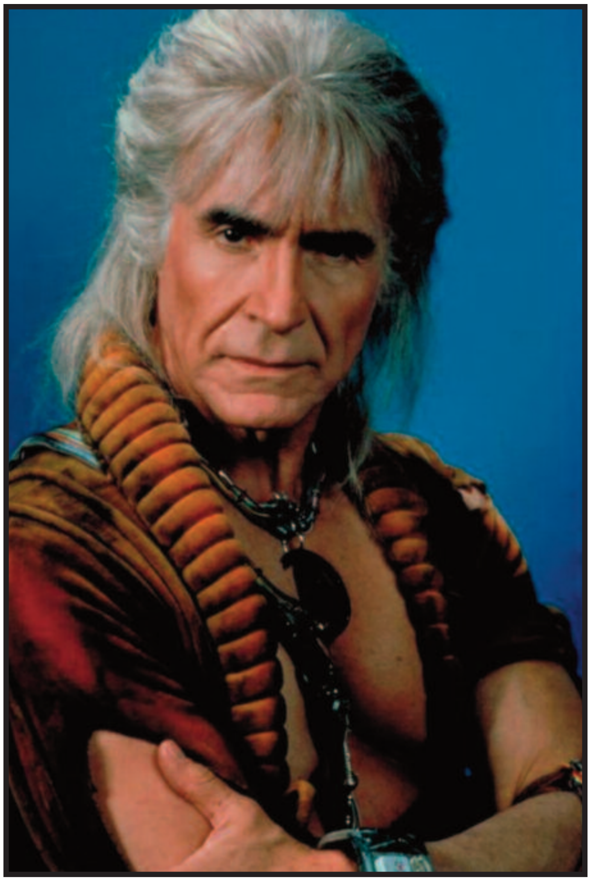
Manner:

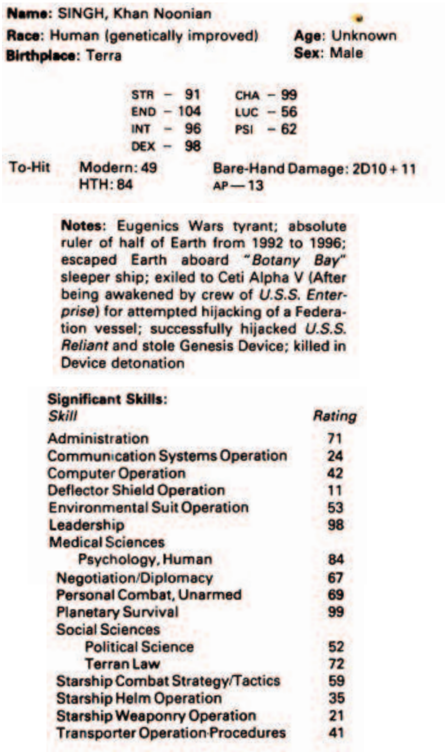
Respectful of other life-forms, Sarek is tolerant of the shortcomings of others, even when such shortcomings put him at a disadvantage. Serene and proud, he is supremely confident of his own abilities.





SAREK / Vulcan, male / Age 102
Former Vulcan ambassador to Federation Council; Chief Vulcan negotiator at Babel Conference; Married to Amanda Grayson of Earth; One child, Spock, serving with Star Fleet.
STR 90 END 79 INT 105 DEX 69 CHA 81
LUC 50 PSI 89
Significant skills: Astronomy/astrophysics 96
Computer technology 81
Negotiation/diplomacy 98





Name: SINGH, Khan Noonian
Race: Human (genetically improved)
Birthplace: Terra
Age: Unknown
Sex: Male

STR – 91
END – 104
INT – 96
DEX – 98
CHA – 99
LUC – 56
PSI – 62

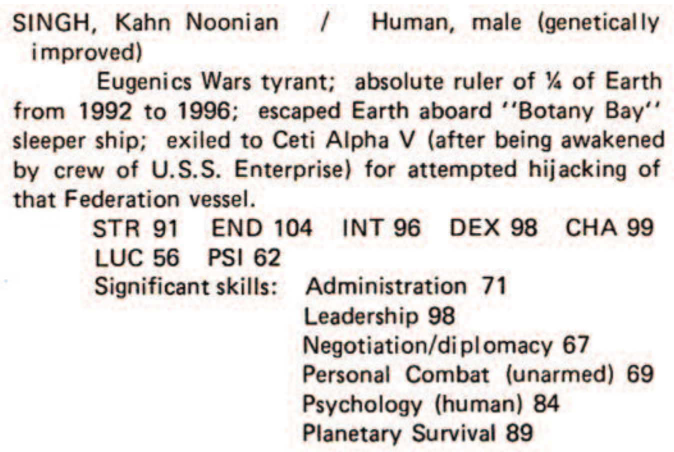
To-Hit Modern: 49 HTH: 84
Bare-Hand Damage: 2D10+11 AP—13

Notes: Eugenics Wars tyrant; absolute ruler of half of Earth from 1992 to 1996; escaped Earth aboard *"Botany Bay"* sleeper ship; exiled to Ceti Alpha V (After being awakened by crew of *U.S.S. Enterprise*) for attempted hijacking of a Federation vessel; successfully hijacked *U.S.S. Reliant* and stole Genesis Device; killed in Device detonation

Significant Skills:

Skill	*Rating*
Administration	71
Communication Systems Operation	24
Computer Operation	42
Deflector Shield Operation	11
Environmental Suit Operation	53
Leadership	98
Medical Sciences	
Psychology, Human	84
Negotiation/Diplomacy	67
Personal Combat, Unarmed	69
Planetary Survival	99
Social Sciences	
Political Science	52
Terran Law	72
Starship Combat Strategy/Tactics	59
Starship Helm Operation	35
Starship Weaponry Operation	21
Transporter Operation Procedures	41

I had to go to the ST III Update to get the above info. I didn't do that for anyone else here as they all got entries in "The Federation". FASA gave Khan an initial blurb, then ignored him until the ST3 update -and even then, not much for this starring villain.

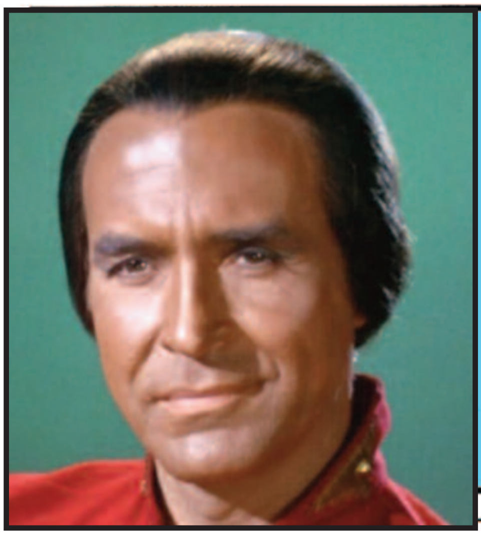


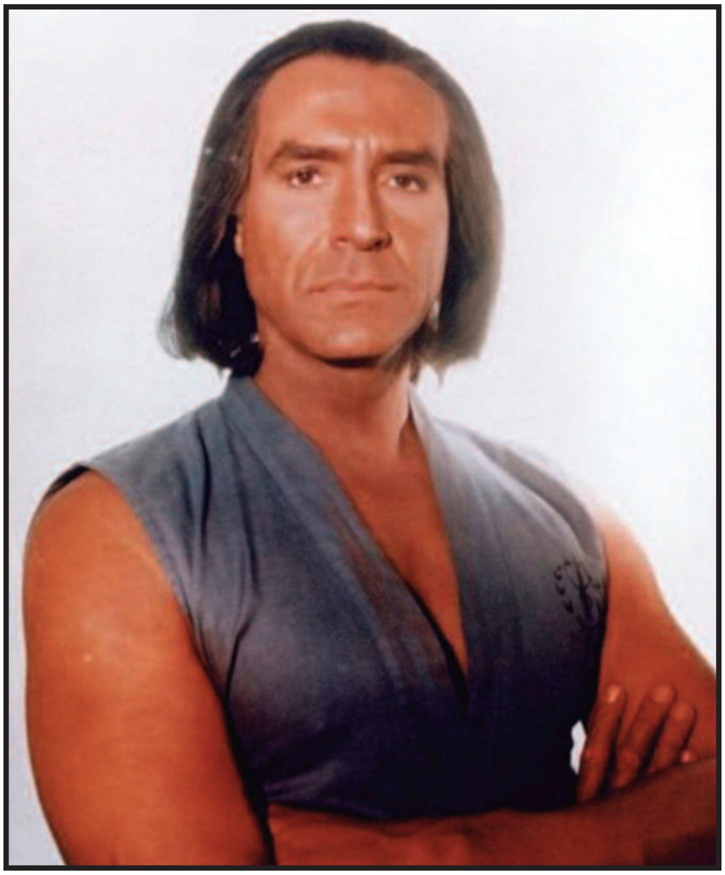
SINGH, Kahn Noonian / Human, male (genetically improved)

Eugenics Wars tyrant; absolute ruler of ¼ of Earth from 1992 to 1996; escaped Earth aboard "Botany Bay" sleeper ship; exiled to Ceti Alpha V (after being awakened by crew of U.S.S. Enterprise) for attempted hijacking of that Federation vessel.

STR 91 END 104 INT 96 DEX 98 CHA 99
LUC 56 PSI 62

Significant skills:
Administration 71
Leadership 98
Negotiation/diplomacy 67
Personal Combat (unarmed) 69
Psychology (human) 84
Planetary Survival 89





Familiar Characters

The crew of the U.S.S. Enterprise are the most capable crew members in Star Fleet. As such, they are far above the average in both character attribute scores and skill levels. Player characters created with the player character creation system are not likely to have the depth and breadth of skill levels possessed by the Enterprise crew.

Skills and attributes for STAR TREK's familar characters are based on observations in the series, traditional fan thoughts, and additions, and rational speculation. Gamemasters should feel free to add to or alter these statistics if they wish. All series regulars have complete character statistics provided, with recurring (but not regular) characters provided in a shorter format, which may be expanded by the gamemaster if desired.

Players and gamemasters not already experienced with role-playing games such as this one are encouraged to play at least a couple of adventures with the familiar STAR TREK characters already provided. More experienced players may wish to proceed directly to creating their own, original Star Fleet officers with the player character creation system.

STAR FLEET PERSONNEL FILE – U.S.S. Enterprise – NCC-1701

KIRK, James Tiberius / Captain / Human, male / Age 34
Commanding, U.S.S. Enterprise
SERIAL No: SC937-0176CEC

STR 68 END 77 INT 84 DEX 79 CHA 94 LUC 98 PSI 29

"TO HIT" (modern arms) 79 (hand-to-hand) 80

SKILL LEVELS

Administration	60	Planet survival	66
Astron/astrop	53	Ship weap tech	29
Carousing	62	Psychol (Human)	49
Computer oper	50	Shuttle Pilot	49
Computer tech	10	Shuttle syst tech	11
Electronics tech	10	Sm equip sys tech	11
Envir suit oper	51	Sm unit tactics	64
Federat history	64	Stshp cmbt tac/str	96
Federation law	86	Stshp commun proc	38
Gaming	82	St engrg (genrl)	22
Instruction	55	Stshp helm oper	62
Languages (ORION)	21	Stshp navigation	79
Leadership	92	Strshp security	32
Mrksmnshp (arch) - (ANCIENT FIREARMS)	36		
Mrksmnship (mod)	78	Strshp sensors	41
Negot/diplom	97	Streetwise	79
Pers weap tech	21	Trans op proc	66
Pers Cmbt (unrmd)	81	Warp drive tech	33

Trivia (LIFE OF ABRAHAM LINCOLN) 91
Trivia (AMERICAN HISTORY) 77

Commendations: Palm leaf of Axanar Peace Mission; Grankite Order of Tactics, Class of Excellence; Prantares Ribbon of Commendation, first and Second Class

AWARDS OF VALOR: Medal of Honor; Silver Palm with cluster; Star Fleet Citration for Conspicuous Gallantry; Karagite Order of Heroism

MEDICAL NOTES: Once contracted Vegan choriomeningitis & still carries microorganisms in bloodstream

BIRTHPLACE: Earth/United States of America

SPOCK / Commander / Vulcan (half-vulcan, half-human), male / Age 40+
First Officer, Science Officer, U.S.S. Enterprise
SERIAL No: S179-276SP

STR 93 END 82 INT 102 DEX 73 CHA 62 LUC 41 PSI 97
"TO HIT" (modern arms) 53 (hand-to-hand) 65

SKILL LEVELS

Admin	56	Physics	77
Astron/astrop	65	Plan ecol	45
Botany	35	Plan surv	51
Com sys tech	44	Sh wpn tech	39
Comp arch (EARTH)	56	Psych (human)	14
Comp op	91	Rac clt/his (human)	62
Comp tech	48	Shutt pilot	47
Elect tech	26	Shutt sys tech	23
Env suit op	29	Sm eq sys tech	31
Fed Hist	56	St cmbt tac/str	55
Fed law	65	St comm proc	14
Gaming	87	St engrg (gen)	46
Geology	44	St helm op	35
Instruction	34	St navig	46
Inst mus (Vulcan lyr)	86	St sensors	92
Lang (ENGLISH)	98	Trans op proc	71
Leadership	52	Trans sys tech	42
Mech eng	21	Zero-G op	38
Neg/dipl	71	Zoology	41
Phys chem	31		

Trivia (EARTH ARTISTS) 37
Trivia (EARTH POETRY) 42
Trivia (EARTH RELIGIOUS LITERATURE) 27

COMMENDATIONS: Vulcan Scientific Legion of Honor; twice decorated by Star Fleet Command

AWARDS OF VALOR: Star Fleet Award of Valor

BIRTHPLACE: Vulcan/ShiKahr

MEDICAL NOTES: Rare blood type (T-negative)

McCOY, Leonard (M.D.) / Lt. Commander / Human, male / Age 45
Chief Medical Officer, U.S.S. Enterprise
SERIAL No: SM831-3840

STR 56 END 54 INT 83 DEX 79 CHA 81 LUC 66 PSI 52
"TO HIT" (modern arms) 50 (hand-to-hand) 52

SKILL LEVELS

Admin	43	Medicine (human)	96
Astron/astrop	10	Medicine (vulcan)	42
Botany	53	Neg/dipl	66
Carous	44	Phys chem	46
Comp op	42	Plan ecol	52
Env suit op	24	Plan surv	26
Fed Hist	38	Psych (human)	56
Fed law	44	Psych (vulcan)	32
Instruction	49	St sensors	31
Lang (LATIN)	47	Streetwise	52
Leadership	47	Zoology	38
Life sup tech	33		

COMMENDATIONS: Legion of Honor

AWARDS OF VALOR: decorated by Star Fleet Surgeons; Star Fleet Award of Valor

PERSONAL NOTES: Divorced with one child (daughter Joanna, 20)

SCOTT, Montgomery / Lt. Commander / Human male / Age 45
Chief Engineer, U.S.S. Enterprise
SERIAL No: SE197-514

STR 61 END 57 INT 91 DEX 66 CHA 62 LUC 71 PSI 22

SKILL LEVELS

Admin	42	Prs wpn tech	34
Astron/astrop	32	Physics	62
Carous	72	Sh wpn tech	37
Com sys tech	39	Shutt pilot	29
Comp op	49	Shutt sys tech	69
Comp tech	47	Sm eq sys tech	45
Def sh tech	34	St cmbt tac/str	31
Elect tech	78	St engrg (gen)	99
Env suit op	34	St helm op	28
Fed hist	32	St sensors	33
Fed law	36	Streetwise	48
Instruction	43	Trans op proc	81
Inst mus (Bagpipes)	54	Trans sys tech	94
Lang (GAELIC)	48	Trivia (alchol. Bev)	89
Leadership	52		
Life sup tech	62	Warp dr tech	97
Mech eng	77	Zero-G op	35
Neg/dipl	33		

BIRTHPLACE: Earth/Scotland

UHURA / Lieutenant / Human, female / Age 29
Chief Communications Officer, U.S.S. Enterprise
SERIAL No: SK2561-1122

STR 54 END 62 INT 87 DEX 89 CHA 86 LUC 71 PSI 41
"TO HIT" (modern arms) 57 (hand-to-hand) 58

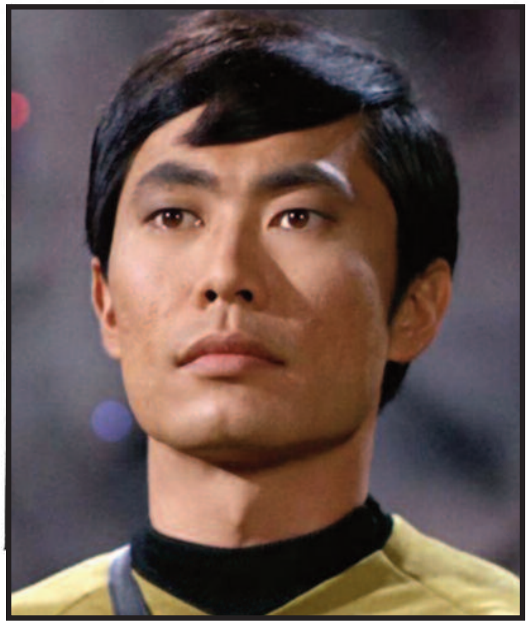
SKILL LEVELS

Admin	42	St navig	48
Astron/astrop	31	St sensors	51
Carous	36	St services	22
Com sys tech	92	Streetwise	39
Comp op	61	Trans op proc	43
Comp tech	33	Vocal music	94
Elect tech	38	Trivia (ANCIENT AFRICAN CULTURE)	86
Fed hist	39	Warp dr tech	27
Fed law	44		
Gaming	39		
Instruction	38		
Inst mus (harp)	62		
Inst mus (vulcan harp)	31		
Lang (SWAHILI)	99		
Lang (FRENCH)	48		
Leadership	52		
Neg/dipl	57		
Physics	34		
Plan surv	37		
Sm eq sys tech	26		
St cmbt tac/str	36		
St comm proc	91		
St helm op	31		

BIRTHPLACE: Earth/United States of Africa

SULU, Hikaru W. / Lieutenant / Human male / Age 31
Chief Helmsman, U.S.S. Enterprise
SERIAL No: SH7730-4967

STR 65 END 63 INT 82 DEX 88 CHA 79 LUC 81 PSI 21
"TO HIT" (modern arms) 75 (hand-to-hand) 68



SKILL LEVELS

Admin	40	St cmbt tac/str	68
Astron/astrop	62	St comm proc	31
Botany	77	St engrg (gen)	23
Carous	41	St helm op	89
Comp op	44	St navig	78
Comp tech	29	St sensors	59
Def sh tech	28	Streetwise	51
Elect tech	45	Trans op proc	35
Fed hist	30	Trivia (ANCIENT FIREARMS)	89
Fed law	32		
Instruction	31		
Leadership	48		
Marks (arch) — (pistols)	54		
Prs cmbt (ar) (sword)	66		
Sh wpn tech	42		
Shutt pilot	57		

BIRTHPLACE: Earth

CHEKOV, Pavel Andreievich / Ensign / Human, male / Age 22
Navigator, U.S.S. Enterprise
SERIAL No: SN2304-0121

STR 64 END 59 INT 81 DEX 68 CHA 81 LUC 60 PSI 11
"TO HIT" (modern arms) 55 (hand-to-hand) 54

SKILL LEVELS

Admin	30	Shutt pilot	18
Astron/astrop	76	Sm unit tact	19
Carous	30	St cmbt tac/str	48
Comp op	33	St comm proc	23
Comp tech	21	St engrg (gen)	24
Elect tech	22	St helm op	32
Env Suit op	25	St navig	77
Fed Hist	41	St security	15
Fed law	39	St sensors	34
Gaming	16	Streetwise	11
Geology	12	Trans op proc	17
Instruction	20	Warp dr tech	39
Lang (RUSSIAN)	96	Zero-G op	21
Leadership	52		
Neg/dipl	21		
Plan ecol	19		
Plan surv	21		
Sh wpn tech	36		

BIRTHPLACE: Earth/Russia

CHAPEL, Christine / Ensign / Human, female / Age 31
Head Nurse, U.S.S. Enterprise
SERIAL No: SM3561-9943

STR 59 END 53 INT 79 DEX 71 CHA 73 LUC 31 PSI 39
"TO HIT" (modern arms) 46 (hand-to-hand) 48

SKILL LEVELS

Admin	53	Medicine (vulcan)	22
Astron/astrop	15	Neg/dipl	51
Botany	84	Phys chem	32
Carous	29	Plan ecol	66
Comp op	39	Plan surv	19
Elect tech	11	Psych (human)	24
Env suit op	16	Psych (vulcan)	11
Fed hist	33	St comm proc	20
Fed law	31	St sensors	31
Instruction	54	Streetwise	13
Language (VULCAN)	15	Trivia (VULCAN COOKING)	29
Leadership	44	Zoology	69
Life sup tech	34		
Medicine (human)	24		

PERSONAL NOTES: Originally research biologist - sciences section. Transferred to medical after death of fiance, Dr. Roger Korby.

BIRTHPLACE: Earth

RAND, Janice / Ensign / Human, female / Age 26
Yeoman, U.S.S. Enterprise
SERIAL No: SV8100-222

STR 52 END 56 INT 69 DEX 68 CHA 71 LUC 20 PSI 45
"TO HIT" (modern arms) 53 (hand-to-hand) 44

SKILL LEVELS

Admin	69	Plan surv	31
Astron/Astrop	35	Psych (human)	19
Carous	29	St comm proc	28
Comp op	31	St helm op	22
Env suit op	16	St navig	30
Fed Hist	52	St security	11
Fed law	41	St sensors	25
Gaming	38	St services	66
Instruction	49	Streetwise	14
Lang (FRENCH)	10	Trans op proc	41
Leadership	28		
Neg/dipl	32		
Plan ecol	16		

BIRTHPLACE: Earth

OTHER ENTERPRISE CREWMEN

RILEY, Kevin / Lieutenant / Human, male
Navigator (transferred from Engineering), U. S. S. Enterprise
Birthplace: Tarsus IV colony
STR 56 END 61 INT 67 DEX 62 CHA 81
LUC 27 PSI 19

Significant skills:	
Starship Engineering (general)	48
Starship Navigation	62
Trivia (IRISH HISTORY)	81
Vocal Music	02

M'BENGA (M.D.) / Lieutenant / Human, male
Medical officer, U.S.S. Enterprise
Birthplace: Earth/United States of Africa
STR 62 END 70 INT 84 DEX 71 CHA 77
LUC 41 PSI 61

Significant skills:	
Medicine (Human)	64
Medicine (Vulcan)	53

DESALLE, Vincent / Lieutenant / Human, male
Asst. Chief Engineer (tranf. from Navig.), U.S.S. Enterprise
STR 71 END 60 INT 76 DEX 59 CHA 61
LUC 38 PSI 13

Significant skills:	
Starship Navigation	61
Starship Engineering (general)	80
Leadership	77

KYLE, Winston / Lieutenant / Human, male
Transporter chief (tranf. from Helm), U.S.S. Enterprise
Birthplace: Earth/Great Britain
STR 62 END 55 INT 71 DEX 81 CHA 76
LUC 28 PSI 22

Significant skills:	
Starship Helm Operation	72
Starship Sensors	51
Transporter Oper. Proc.	84
Transporter Sys. Tech.	39

FAST NPC ATTRIBUTES
Base + Bonus Pts

Super-Heroes
80+1d10(d10)
(Garth, Daystrom, Flint)

Stars
70+1d10(d10)
(Kirk, Spock, McCoy)

Co-Stars
60+1d10(d10)
(Scotty, Sulu, Uhura)

Supporting Cast
50+1d10(d10)
(Riley, Hadley, Brent)

Extras
40+1d10(d10)
(Joe, Cindy, Frank, Lula)

Khan Noonian Singh
exists in the Z+ range

Subtract points from one Attriibute and move to another for a more realistic distribution.

TYPICAL FEDERATION PERSONNEL

Use these guidelines for creating non-player crewmen for Star Fleet ships. Add or subtract appropriate modifiers for the character's racial type (Human, Vulcan, etc.). These guidelines enable a gamemaster to fill out a landing party quickly.

SECURITY GUARD
STR 60+2D10 END 60+2D10 INT 50
DEX 60+2D10 CHA 40+1D10 LUC % die
PSI % die
Significant skills: Marksmanship (modern) 40+3D10
Personal Combat (unarmed) 40+3D10
Starship Security 25+3D10

ENGINEERING SPECIALIST
STR 60 END 55 INT 55+3D10 DEX 60
CHA 50+2D10 LUC % die PSI % die
Significant skills: Starship Engineering (general) 50+4D10
Any technical specialty 50+4D10

SCIENCES SPECIALIST
STR 55 END 55 INT 55+3D10 DEX 60
CHA 50+2D10 LUC % die PSI % die
Significant skills: Any science specialty 55+4D10

COMMODORE or ADMIRAL (serving planetside)
STR 35+3D10 END 30+4D10 INT 55+3D10
DEX 35+3D10 CHA 55+3D10 LUC % die
PSI % die
Significant skills: Administration 55+4D10
Negotiation/dipl 50+3D10
Leadership 50+4D10

Non-Player Character Races

This section deals with creating non-player characters of various non-human races who often interact with Federation Star Fleet crews. This section will cover the most prominent rivals of the Federation, giving adjustments for rolling character attributes and providing statistics for typical characters found in certain important positions.

Expansions to these rules are planned to allow players to create player characters who are Klingons, Romulans, etc. Meanwhile, these rules and guidelines will allow gamemasters to prepare non-player characters from these races for use in scenarios and campaigns.

KOR / Captain / Klingon, male
Commanding, Klingon D7 Battlecruiser "Klothos"
STR 83 END 77 INT 62 DEX 74 CHA 31
LUC 21 PSI 16
Significant skills: Leadership 81
Marksmanship (modern) 62
Personal Combat (unarmed) 75
Negotiation/diplomacy 27
* Interrogation 83
Starship ComTactics/Strategy 49

KOLOTH / Captain / Klingon, male
Commanding, Klingon D7 Battlecruiser ''Devisor''
STR 79 END 81 INT 76 DEX 71 CHA 59
LUC 36 PSI 21
Significant skills: Leadership 79
Marksmanship (modern) 57
Personal Combat (unarmed) 41
Negotiation/diplomacy 42
* Interrogation 69

KLINGONS

The Klingon Empire is a military dictatorship that is the chief foe of the United Federation of Planets. War between the two organizations is only prevented by the Organian peace treaty imposed by the powerful, peace-loving residents of Organia. Under this treaty, no open hostilities between the Empire and the Federation are allowed. The disputed area bordering both spheres of influence is administrated by Organia, with planets within it allowed to fall under the control of the government who is best able to develop the planet efficiently.

Physically, the Klingons are similar to Earth humans, at least on the outside. They tend to be of dark complexion and hair color. Male Klingons often wear beards and moustaches. Their internal construction is quite different, however. A cursory scan with a standard medical scanner will detect Klingon physiology instantly, even though it is quite easy to disguise the outer appearance as a human.

The Klingon racial philosophy is that of ruthless warriors; but they are not berserk. They wage war with forethought and cunning, yet war is the natural, preferred state for most Klingons. For this reason, Klingon society stresses physical strength and martial skill above scientific achievement. Most Klingon scientific effort is placed into development of weapons.

The Klingon government suppresses the development of psionic activity, considering such to be a risk to Klingon security. Personal charisma is less important in Klingon society than strength and cunning, as advancement in one's field is often through blackmail, betrayal, or other use of overt or covert force.

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KLINGON NPC ADJUSTMENTS

STR +10 END +5 INT standard DEX standard
CHA -20 LUC -40 PSI -50

TYPICAL KLINGON CAPTAIN (Battlecruiser or other major warship)

STR 60+2D10 END 55+2D10 INT 50+2D10
DEX 50+2D10 CHA 30+2D10 LUC 10+2D10
PSI 2D10

Significant skills: Leadership 50+2D10
Negotiation/Diplomacy 20+2D10
Interrogation 60+2D10
Starship cmbt tact/strat 40+2D10
Marksmanship (modern) 40+2D10
Personal cmbt(unarmed)40+2D10

TYPICAL KLINGON SOLDIER/GUARD

STR 65+2D10 END 60+2D10 INT 30+2D10
DEX 60+2D10 CHA 20+2D10 LUC 5+2D10
PSI 2D10

Significant skills: Marksmanship (modern) 40+2D10
Personal cmbt(unarmed)45+2D10
Starship security 20+2D10
Small unit tactics 2D+2D10

EQUIPMENT: Landing parties carry hand disruptors and Klingon communicator/'corders. Security personnel carry disruptor rifles and sometimes wear armored vests (-2 points damage from all hits). Command personnel (captain, first officer, security officer, medical officer) carry agonizers.

ROMULANS

The Romulan Confederation is the other major rival of the Federation. The Romulan race is thought to be an offshoot of the Vulcan race which never got over its militaristic ways.

Though physically similar to the Vulcans, the Romulans are not physically as strong. (The Romulan planets are believed to be less harsh and demanding of climate than Vulcan. Thus, the Romulans have not developed into quite as hardy a race.) Also, since Romulan culture favors obedience over original thought and action, Romulan intellectual achievement is not as high as that on Vulcan, on the average.

In development of psionic abilities, Romulans are, unlike their Vulcan cousins, lukewarm toward such research. Thus psionics are not a widely developed or prized ability class. Romulans, however, have not abandoned reliance on intuition and hunches to the extent that the Vulcans have done so, causing them to have a "luckier" reputation than Vulcans.

The Romulan lifestyle is a Spartan existance, with personal wants sublimated for the good of the whole. The Romulans are great warriors, but fight in a cool, calculating manner. They take no prisoners, ask and give no quarter, and demand instant obedience from soldiers and populace alike. In one sense, the populace is the army, as all Romulan citizens are required to serve with armed forces in some capacity for a period of time. The Romulans are intelligent, dedicated, and very efficient.

First contact with the Romulans led inevitably to war. So devastating was this early conflict that in no engagement did Federation personnel who actually made contact with the enemy survive to tell about it. The first Romulan war was fought a century prior to the mission of the U.S.S. Enterprise, but only since the Enterprise fought off a Romulan raid in recent times (Stardate 1709.0; *The Balance of Terror*) has the Federation known what they look like.

The first Romulan War was an enormous drain on both sides, as it was fought over a period of many years by slower-than-light spacecraft. But the many worlds of the Federation had the resources to maintain the battle and the Romulans did not. Eventually, the Romulans sued for peace.

A so-called neutral zone was established between the Federation and Romulan space. Border posts were placed on both sides, with all ships permanently banned from entering the no-man's-land thus established. But the Romulan pride eventually asserted itself, leading to a number of incidents between Federation and Romulan vessels in recent years.

Most recently, the Romulans have made contact with the Klingon Empire and formed certain trade and technology-swapping agreements. This had led to the adoption of Klingon-design ships (including D-class battlecruisers) by Romulan fleets, replacing to some extent their less powerful Bird-of-Prey class ships. Romulan soldiers and guards also are known to use Klingon-design sidearms.

Unlike the Klingons, Romulans practice equality of the sexes, being more interested in the efficiency of an officer than his/her sex. Romulans, unlike Vulcans, are very much creatures of pride, emotion and passion, possessing the capacity for great violence when provoked.

ROMULAN NPC ADJUSTMENTS
STR +10 END +10 INT standard DEX +5
CHA standard LUC -10 PSI -20

TYPICAL ROMULAN SUB-COMMANDER
(commands one ship of a fleet)
STR 60+2D10 END 60+2D10 INT 50+2D10
DEX 55+2D10 CHA 50+2D10 LUC 40+2D10
PSI 30+2D10
Significant skills: Administration 40+2D10
Negotiation/Diplomacy 40+2D10
Leadership 60+2D10
Starship cmbt tact/strat 50+2D10

TYPICAL ROMULAN CENTURION
STR 70+2D10 END 70+2D10 INT 40+2D10
DEX 65+2D10 CHA 35+2D10 LUC 30+2D10
PSI 10+2D10
Significant skills: Marksmanship (modern) 60+2D10
Personal cmbt(unarmed)60+2D10
Starship security 40+2D10

EQUIPMENT: Landing parties carry hand disruptors and communicators (similar to Federation design); security personnel carry disruptor rifles and wear armored vests and helmets (-2 points damage per hit).

GORN

The Gorn are a reptilian race of warriors. Though battle is not the overwhelming preoccupation with them as it is for the Klingons and Romulans, the Gorn do prize physical strength and endurance over intellect.

The Gorn planets are heavier gravity worlds than Earth, with a harsher climate. Their reptilian bodies have developed harder and more enduring for this reason.

Gorn society, and Gorn individuals, are not given to subtlety. Even Gorn engineering is of the "push hard until it moves" variety. The Gorn do not attempt to be charismatic, preferring to persuade by physical domination. They consider psionics a fidgety and unworthy discipline, and do not pursue such studies.

Though initial contact with the Gorn led to a violent confrontation (that was abruptly halted by the Metrons—see the episode *Arena*), talks are now progressing slowly, with each side grudgingly (at least on the part of the Gorn) avoiding impingement on the space of the other until border disputes can be resolved.

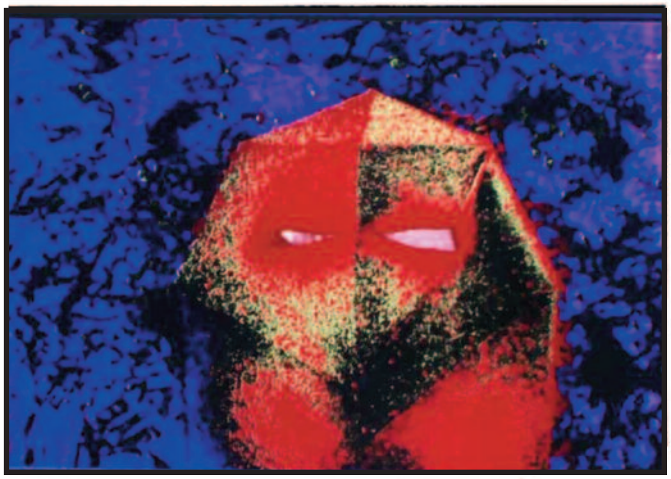
GORN NPC ADJUSTMENTS
STR +30 END +25 INT standard DEX -20
CHA-20 LUC -20 PSI -40
Personal cmbt damage +4 (claws and teeth)
Natural Armor -5 points/attack (reptilian skin)

TYPICAL GORN CAPTAIN
STR 80+2D10 END 75+2D10 INT 50+2D10
DEX 30+2D10 CHA 30+2D10 LUC 30+2D10
PSI 10+2D10
Significant skills: Negotiation/Diplomacy 20+2D10
Leadership 40+2D10
Personal cmbt(unarmed)50+2D10

TYPICAL GORN SOLDIER
STR 90+2D10 END 85+2D10 INT 30+2D10
DEX 25+2D10
CHA 10+2D10 LUC 20+2D10 PSI 10+2D10
Significant skills: Personal cmbt(unarmed)65+2D10
Marksmanship (modern) 40+2D10
Small unit tactics 40+2D10

EQUIPMENT: Landing parties carry Gorn blasters and communicators (similar to Federation design).

THOLIANS



Little is known about the Tholian race. No member of this race has ever been seen in person by a Federation representative, and almost nothing is known about their physical capabilities.

The following information is extrapolation based on starship-to-starship encounters, viewscreen observation, and expert opinion based on limited data.

The Tholians guard their small area of space rigorously, allowing no traffic there without challenge. They are punctual, precise, and extremely suspicious. Though no state of war exists betwen the Tholians and the Federation, Federation vessels avoid Tholian space whenever possible. The Tholians, for their part, have never been known to venture beyond the boundaries of their own space.

THOLIAN NPC ADJUSTMENTS
STR unknown END-10 INT +10 DEX unknown
CHA -20 LUC -20 PSI unknown

TYPICAL THOLIAN CAPTAIN
STR ? END 40+2D10 INT 60+2D10 DEX?
CHA 30+2D10 LUC 30+2D10 PSI?
Significant skills: Leadership 50+2D10
Negotiation/Diplomacy 20+2D10
Starship cmbt tact/strat 60+2D10

EQUIPMENT: No significant information is known about Tholian personal weapons or equipment.

ORIONS

The Orions, from a planet in the Rigel star system, are an allegedly neutral group. They tend to encourage privateers (pirates), however, on an informal and unofficial basis. Orion pirates and smugglers are sometimes encountered by the Federation.

Orion males, for the most part, are human-like beings, with skin color ranging from a ruddy golden orange to to more humanlike tones similar to Earth caucasians. There are females of this race as well, but some females are born who appear very much like human females, but with green skin. The green-skinned women are held in semi-slavery arrangement by the Orion men.

The green-skinned Orion women are seductive, with legend holding that human males cannot resist them. They are less intelligent than the dominant Orion species (or are said to be, though this may be more from lack of educational opportunity than genetics) and behave in a semi-animalistic fashion. Such women usually have long sharp nails and a greater physical dexterity than the dominant Orion male.

Transport of slave women beyond the neutral Orion planets is prohibited and, of course, slavery is outlawed at all levels of the Federation. Few Federation Star Fleet personnel have ever seen an Orion slave woman, but it is a frequent boast during the traditional male "bull sessions" around the mess table.

ORION NPC ADJUSTMENTS—Dominant males and females
STR +10 END standard INT standard DEX standard
CHA -10 LUC -25 PSI -30

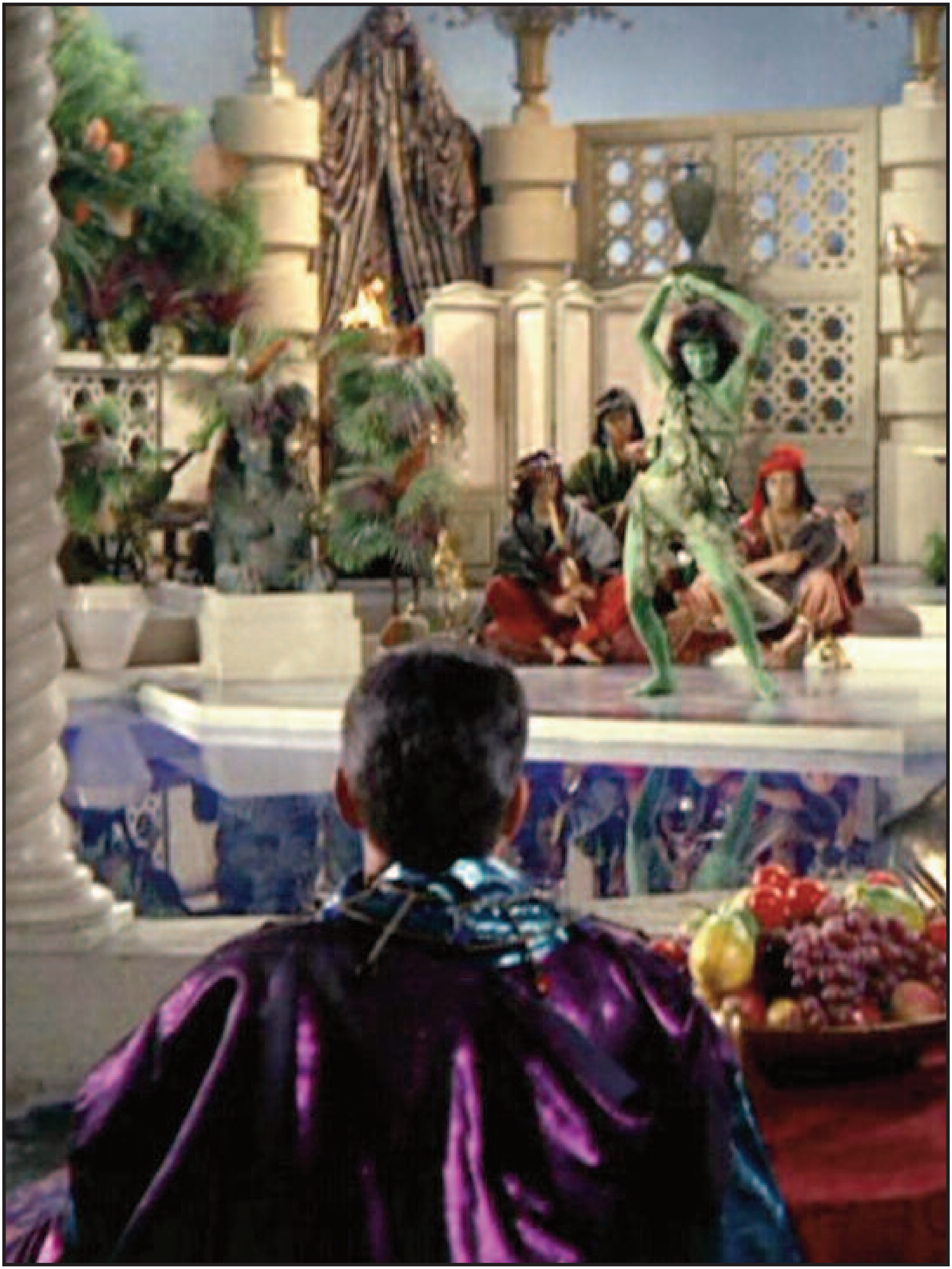
ORION NPC ADJUSTMENTS—Green slave females
STR standard END standard INT -30 DEX +30
CHA +30 LUC -10 PSI -10

TYPICAL ORION SMUGGLER CAPTAIN
STR 60+2D10 END 50+2D10 INT 50+2D10
DEX 50+2D10 CHA 50+2D10 LUC 25+2D10
PSI 20+2D10
Significant skills: Marksmanship (modern) 40+2D10
Personal cmbt(unarmed)30+2D10
Leadership 60+2D10
Negotiation/Diplomacy 65+2D10
Starship cmbt tact/strat65+2D10
Streetwise 60+2D10
Trade and commerce 60+2D10
Bribery 60+2D10

EQUIPMENT: All smuggler crew carry sidearms, usually disruptor type, similar to Klingon design. Phasers may occasionally be used of Federation manufacture.

TYPICAL ORION SLAVE WOMAN
STR 40+2D10 END 40+2D10 INT 20+2D10
DEX 80+2D10 CHA 90+2D10 LUC 40+2D10
PSI 30+2D10
Significant skills: Personal cmbt(unarmed)20+2D10
Streetwise 60+2D10
Vocal music 40+2D10
Artistic ability (Dance) 70+2D10
Courtesan 70+2D10 *
Carousing 70+2D10

EQUIPMENT: Slave women employed in public entertainment often carry small knife-like weapons concealed. Some may be poisoned or drugged. Also, slave women have claw-like fingernails, helpful in hand-to-hand combat, that add 2 points of damage to hand-to-hand attacks, beyond damage done according to STR.



A Final Frontier of Your Own

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by John J. Terra

Campaign creation for FASA's STAR TREK®: The Role Playing Game

Captain's Log, U.S.S.* Valiant, *Captain Koren Anastas reporting; Reference Stardate 2/2202.11: It has been 36 hours since First Officer Yoshitomo Karasuma, Chief Engineer Stephen Decataur, Chief Science Officer Kai-Jasik, and Dr. Trisha Steuben beamed down to the surface of Gamma Draconis IV We have lost contact with them, but we face an even greater problem. The IKV Leading Sword, a Klingon D-10 heavy cruiser, has taken up an orbit trailing our position. The captain of that vessel has a personal grudge against me. I can do little about it, as Starfleet has instructed us not to initiate hostilities. I dare not lower my shields to beam down a search party, since this will leave my vessel vulnerable to the Klingons. These next few hours will sorely test my command abilities, and I pray that I will not be found wanting.

By now you must be wondering who on earth (or anywhere else in space) is Koren Anastas, and what is the U.S.S. ***Valiant?*** To about two dozen people, the U.S.S. ***Valiant*** is a ship as familiar as the legendary U.S.S. ***Enterprise*** is to all of Trekdom. It is an ***Enterprise*** - class vessel around which a particular STAR TREK® The Role Playing Game campaign revolves. A campaign is the best way to play this game, and this article will show how to run one.

Why a campaign?

FASA Corporation has published many STAR TREK game modules that contain ready-to-play PCs and their ships. While this is certainly convenient and good for those who play only once in a while, it is not helpful to those who want a continuous campaign.

Players of other role-playing systems have enjoyed the satisfaction of creating PCs from their own imaginations and playing them. After playing one character repeatedly, the player can see the PC grow in strength and experience. A personality develops, making the PC a believable entity. It becomes a source of pride and a symbol of accomplishment.

For the STAR TREK game, this principle applies in more detail. Imagine a lieutenant PC in the Helm department who is played often enough to rise in rank to Chief Helmsman. Further into the campaign, the ship's First Officer resigns, and the Captain chooses the Chief Helmsman to replace her. Eventually, the Captain retires and our humble former lieutenant now rises to the rank of Captain and takes command of the vessel. Can you imagine how richly developed such a PC is? Think of what this PC has been through and the stories he can tell!

It gets even better. The previously mentioned U.S.S. ***Valiant*** was assigned to my campaign group as a ***Constitution*** - class vessel. The campaign's beginning stardate was mutually agreed to be the time that Captain Kirk and the U.S.S. ***Enterprise*** returned from their five-year mission. Time progressed, and the ship was eventually converted to a powerful ***Enterprise***-class vessel (as per ***Star Trek: The Motion Picture).*** For about a year, while the U.S.S. ***Valiant*** underwent her conversion, the crew was reassigned to a dinky transport/ espionage vessel. The crew developed a quick appreciation for its old ship, and everyone was overjoyed when reunited with her. (It is easy to see why Kirk was so attached to his own ship.) But in time, the U.S.S. ***Valiant*** was retired because of excessive wear and tear. The campaign now centers on the Excelsior-class battleship, the U.S.S. ***Excalibur,*** NCC 2004. Ships, too, develop lives of their own.

In short, a campaign allows the development of PCs and events. It gives the players goals, whether to seek the head of a department or the command of a starship. The campaign approach gives a sense of consistency and continuity which makes the game resemble "real life" a bit more. Friends are made, contacts are established, and, inevitably, enemies are created. Events that help mold each PC's personality occur, helping the PC's history grow to the size of a small novel.

Getting things ready

Before starting a campaign, the game master (GM) should become as well versed in as many aspects of ***Star Trek*** as possible. There are several different science-fiction role-playing games on the market, but only one ***Star Trek*** environment. It is not enough for a GM to know science fiction; the GM must be able to capture the feel of ***Star Trek.***

The sourcebooks that FASA Corporation publishes are top priority. The books most needed in addition to the game itself are the ***Star Trek III*** and ***Star Trek IV Sourcebook Updates,*** and the Klingon, Romulan, Federation, and Orion sourcebooks and ship recognition manuals. These books enable the GM to start his campaign anywhere in the Federation and at any point in history from the beginning of Kirks five-year mission to his demotion from admiral back to captain, commanding a new U.S.S. ***Enterprise.***

Other sourcebook and reference materials are helpful but not essential unless your campaign is geared in these directions. These materials include: ***Trader captains and Merchant Princes,*** the ***Triangle Sourcebook*** and ***Triangle Campaign Book,*** and the ***Star Fleet Intelligence Manual.*** Note: ***Trader Captains and Merchant Princes*** includes a little-known but much desired bit of information—how much a Starfleet officer gets paid!

The ***Star Trek: The Next Generation Officers Manual*** is only needed if you want hard data on new Starfleet vessels. From a game-mechanics standpoint, it gives little information on a campaign set in the timeline of the new television series.

If your campaign includes ship battles and you want them to be "realistically" portrayed, the ***Star Trek Starship Combat Tactical Simulator*** is a good investment.

Watching episodes of the old series gives you the flavor of the ***Star Trek*** environment and terminology. The movies are a must. As far as the dozens of ***Star Trek*** novels are concerned, many are not consistent with the actual ***Star Trek*** universe—or with each other, for that matter. Still, any ***Star Trek*** novels by John M. Ford, Diane Duane, or Vonda McIntyre are fairly consistent and worthwhile.

Timing is everything

The next thing you should decide on is the time period in which the campaign is taking place. Between the beginning of the old series and the end of the fourth movie, approximately 16 years have passed. During that time, Federation technology has improved and political situations have changed. New worlds have been admitted to the UFP the Organians have stopped enforcing the Organian Treaty, and Project Genesis has caused a galactic uproar.

The ship recognition manuals become valuable tools in showing the smart GM which ships were available at what points in history. It can be very embarrassing to be caught using Spacedock a full decade before its completion! The ***Federation Ship Recognition Manual*** shows, for instance, when each Constitution-class vessel was refitted to ***Enterprise*** - class, if ever.

The timing also dictates which Starfleet uniform is in use. It might be the old series' vintage velour shirts in red, blue or gold (nice), the pastel pajamas of the first movie (gross), or the maroon tunics used in the rest of the movies (sharp!). There are different models of phasers, communicators, and tricorders. Even environmental suits range from the old series' laughable space suits to the much better ones used in ***Star Trek II: The Wrath of Khan.***

Of course, relations with ***Star Trek's*** favorite race of villains, the Klingons, change slightly. It varies from the Klingons saying "I'll kill you now!" to "I'll kill you if the Organians are not looking!" to "I'll maim you now and kill you later; give me Genesis!" The lifting of the Organian Treaty becomes a very crucial point in history, enabling unrestrained ship battles among the major powers.

The only consequence of starting your campaign in the early years of the saga is that the PCs will grow old. By the time your campaign reaches the date of the fourth movie, your group will be ready to play "Geriatrics in Space." If the PCs begin at a relatively young age, this effect will not be too bad, but it also means that their initial influence on the ship will be less. Limiting the number of tours in the PCs' histories will give the campaign a younger though less-experienced crew.

Choosing your ship

Ship selection is something that the GM and players can enjoy together. Naturally, the size of the group should affect the size of the ship. An Enterprise-class cruiser needs more department heads than does a Nelson-class scout ship.

Personally, I recommend an ***Enterprise*** class vessel. Not only is it a recognizable ship to even the most casual player, it is also a versatile ship that will not blow up the first time it is fired upon. Once again, the ***Federation Ship Recognition Manual*** is a must. It gives a full list of ***Constitution-*** and ***Enterprise-class*** vessels including hull numbers, refit dates, and special notes. The manual also addresses the ***Reliant-***class research cruiser, which is another good choice for a campaign vessel. Truly nasty GMs can assign a vessel that is fated to be destroyed or scrapped at a certain date, and then create an adventure when this happens! If such a dastardly type of GM exists, it is hoped that he would be kind enough to give the PCs a fighting chance to survive, as well as ensure that the PCs do not read about their own futures beforehand.

The disadvantage of a large ship becomes painfully obvious to any GM whose mind is one step ahead of his players. A ship of such tremendous power needs some challenging assignments.

If your players are of the hack-and-slash variety, you could always assign them a Military Operations Command vessel such as a ***Loknar*** - class frigate or a Larson-class destroyer. Ships of these two classes are also listed in the ***Federation Ship Recognition Manual*** by hull number and name, and are all excellent ships.

Please do not initially assign the PCs something like an Excelsior-class battleship! This is the equivalent of an AD&D® game's DM assigning his players + 5 armor, weapons, and rings at 1st level, or like a TOP SECRET/S.I.™ game's Administrator assigning his rookie agents Uzis, M16s, and ultra high-tech helicopters.

Reviewing the crew

The next step is to get a crew assembled. The STAR TREK game requires a command hierarchy of a Captain, First Officer, and Department Heads. There is no need to elect a party leader as in other games. The Captain is the leader, and everyone had better darn well listen to him or else consign themselves to an unglamorous fate of serving on an ore freighter.

This structure makes the Captain and First Officer the most crucial persons on the ship. The rules in the STAR TREK game recommend that the GM select the two people for those positions, and this is a sound idea. But whom do you choose?

Some say that the best leaders are those who do not actively seek to lead. Good leaders do not chase after positions of power and glory, and they are the ones you want for command duties. The GM needs to select two people who are good at making decisions and giving orders without ego tripping. They need to elicit trust from the other PCs and be able to trust them to do their own jobs. The leaders should be team players who inspire cooperation and not chaos.

Think about the implications of commanding an ***Enterprise*** - class vessel. This ship has enough firepower to devastate a planet. It contains over 400 NPCs and 6-12 PCs. One wrong decision and all those people, including the PCs that the players took years to develop, become space dust. That is a big responsibility. Leaders must first be servants, and the lesson is as relevant in gaming as it is in real life. The commanders must put their personal interests behind those of their crew and the ship. The best leader is not &tin-plated, swaggering dictator with delusions of godhood.

Choosing the First Officer is just as important as choosing the Captain. Remember, if the Captain is disabled, the First Officer assumes command. The perfect First Officer does not interfere with his Captain's duty. Rather, he supports his commanding officer, giving advice when asked. A good First Officer also acts as a liaison to the crew, intercepting and solving minor problems while the Captain remains free to face bigger crises, such as five million tribbles in the food processors or the Klingon task force bearing down on the ship. As a rule, the First Officer has the conn if the Captain is off the bridge, and sometimes the First Officer is asked to lead a landing party. In the true Mr. Spock tradition, you can assign a department head the additional responsibility. If you have few players, this is sound strategy. Security, Engineering, or Medical department heads are not good choices for double duty, however.

After these two difficult positions are assigned, let the rest of the players divide up the departments. Each department is unique, and certain personality types seem to be better suited for certain departments. The nonviolent types may enjoy Chief Medical or Chief Communications Officer. The law-and-order or the hack-and-slash player would be perfect for Security Chief, though we all know what happens to Security personnel ("Ensign Slob, check behind that rock." "Yes, sir!" ZAP! AAGH! GROWF! POOF! "Poor Slob!").

Players who enjoy using their brains may go for Science or Engineering, while the players who like blowing things up or zooming around space at ludicrous speed will love Chief Helm. Finally, there is that position voted Most Boring by my campaigners: Chief Navigator. At best, this poor person gets to raise deflector shields during battle. Most of the time, however, the Chief Navigator says "Course laid in, Captain," then sits back. Give this position to either the most rabid Trekkie in your group who loves to play so much that he will take anything, or to someone who doesn't care what job he holds.

Be aware that Helm, Navigation, and Science supply many future command personnel, so keep your eyes on those people. They may be worth promoting.

Though the old series did not show it much, there were nonhuman crew members on the U.S.S. ***Enterprise*** other than Mr. Spock. Budget constraints on makeup dictated what sorts of aliens we saw. Fortunately, role-playing games are limited only by imagination. Let players choose their own races, but temper their choices with common sense. There are advantages to playing nonhumans, usually in the form of attribute modifiers. The disadvantage should be that the player must act in the manner proper to that race, and some of the races are downright bizarre.

The player whose PC weeps uncontrollably at the drop of a hat (or helm) would make a terrible Vulcan. The player whose PC is always mellow and laid back is a poor choice for a stubborn Tellarite. The Chief Medical Officer should be the same race as the majority of the crew. A Vulcan should rarely be Chief Helm, since helmsmen fire the ship's weapons and Vulcans dislike violence. Vulcans are also not party animals, greedy, power hungry, or rowdy (and they flirt only once every seven years).

Only a fool would choose a Tellarite for Chief Communications Officer ("This is Commander Taubarrgjjh of the U.S.S. ***Valiant*** — speak, Klingon slime!") or place an Andorian in a position that may involve hot temperatures such as an engineering area. Deltans are lovers, not fighters, and consequently would be flops as Security Chiefs (but would make good doctors). Efrosians make excellent doctors, and their warrior background means that the good doctor may justifiably get involved in a good melee or two. Andorians are a good choice for the warrior-type player, but even this race attempts to be as unemotional as the Vulcans. When they *do* get riled up, watch out!

The STAR TREK game's character-generation system is excellent because it provides the player with a PC who is already an experienced officer rather than a raw recruit. The GM may give each PC a score of 10 in his respective planet's Culture/History skill but not count it against the PC's amount of pre-Academy skills. Any civilized planet would give its children instruction in basic culture and history whether the child wants it or not. If the planet has a particularly hostile environment, the GM is also justified in awarding a bonus of 10 in the appropriate Planetary Survival score.

Very few role-playing games show the need for teamwork as much as the STAR TREK game. Everyone must work together to accomplish a goal. Reward the players when they work together, and discourage "lone wolf" tactics where one PC goes off to do something stupid. Such a PC should be considered phaser fodder.

A cast of thousands

As mentioned earlier, the red-shirted security personnel in the old ***Star Trek*** series were notorious for their short life spans. Inevitably, they would be stabbed, disrupted, poisoned, dropped from great heights, changed into Styrofoam polyhedrons, or burned to death by an angry Horta. Even nonsecurity personnel got their share of death and maiming. After the GM establishes his crew, the next wise move is to create a set of NPCs to not only support the PCs but to present themselves as great targets. STAR TREK NPC crewmen are great victims for those villains who cry, "I shall give you an example of my power, puny mortals!"

Ideally, a PC in the STAR TREK game should have a long lifespan, probably the longest of any RPG. In the old series, the main characters never died. In the game, the PCs are the main characters. This does not mean that there should never be any possibility of PC death, but rather that it should be approached carefully. A game without risk is no fun, but the risk should be well considered. If your players deserve it, give them a "back door" to get out of the situation. Stupid actions deserve harsh consequences, while smart actions should be a good reason to spare PC lives.

Back to the NPC creation. If your campaign is centered on any good-size vessel, you have several hundred NPCs to consider. You should not create stats for all of them, but you could allow one or two assistants for each PC. Starships operate around the clock, so crew are needed to man various stations in the PC's absence,. Create personnel to crew helm, navigation, communication, science, and engineering stations during the off shifts.

Give these NPCs some fleshing out! Assign them a Trivia or Gaming score. Give them some critical skills that few players chose for their PCs during generation. This is a good chance to throw in a few of your favorite races. Go ahead, give them a Vulcan science officer, a Zaranite engineer specializing in Starship Weaponry Tech, an Arkenite marine biologist, or an Efrosian navigator! My campaign's favorite NPCs include an Andorian chief nurse, a small telepathic worm, and a human communications assistant with such a loud, gregarious personality that he nearly blows out the audio circuits!

In addition, flesh out the commander of the nearest starbase, a few Starfleet Command officers, and a few ship captains from other Starfleet vessels. You need not repeat the old series' tendency to have most of Captain Kirk's friends dying or going insane. Give your NPCs some staying power. A rival officer may cause some problems, and a persistent Orion family may have a grudge against the ship. You can even create a Klingon or Romulan vessel that pops up wherever the PCs and their vessel are, threatening to throw a spanner into their plans.

Your five-year mission. . . .

After assembling all of this information, it is time to decide what sort of missions to put the players through. First, let's tackle the FASA modules.

As mentioned before, the STAR TREK game modules are not best suited for a continuous campaign using the same ship and PCs. There are, however, several notable exceptions. Bear in mind that the following modules require adaptation.

Where Has All the Glory Gone?, Denial of Destiny, Demand of Honor, and ***The Strider Incident*** are all good for adapting to an ongoing campaign. You can make the changes without turning the product into something unrecognizable. The latter two modules are also very well written.

The Dixie Gambit, Decision at Midnight, A Conflict of Interests, and ***The Mines of Selka*** are all good modules but have very limited use in a campaign. It is still possible to use them, but a GM needs to do heavy tinkering or alter the PCs' circumstances. If the PC's vessel is undergoing a refit or repair, these adventures are good fillers.

Return to Axanar and ***Old Soldiers Never Die*** are dubious at best but are recommended for the wonderful sourcebooks they provide. ***Return to Axanar*** is a very long adventure requiring several sessions and is unfortunately very linear, taking the PCs from one encounter to the next regardless of their actions.

Since the release of ***The Strider Incident*** (a terrific adventure that also includes deck plans for the Regula I research station, a good investment), there have been no new STAR TREK modules. Thus, it falls on the GM's shoulders to come up with an excellent campaign.

General Order Number One—the Prime Directive—is the most powerful restraint available to the enterprising (no pun intended) GM. It is frustrating to the players to know that they run a vessel that could destroy a star system, yet they cannot unleash this power on the penny-ante barbarian village that has a couple of the ship's officers as hostages. When the GM creates an adventure, the Prime Directive must always be kept in mind. Violating it could mean discharge from the service, imprisonment, or (in extreme cases) death. The Prime Directive becomes a special burden during exploration missions.

Star Trek is about galactic exploration. While blasting Klingons or outwitting Orions can be fun, the spirit of the series—and consequently the game—is exploration and discovery. You can have a ship battle in every game, but remember that the various spacefaring powers have a finite number of ships. Try not to let every session degenerate into a high-tech slugfest.

The finest exploration missions are the first contacts, those missions during which a new race is discovered and the PCs must deal with strange and sometimes hilarious differences in cultures. The best way to approach this is to create a new race, not necessarily humanoid. Then, throw out all customs known to the players and reinvent them, mixing them up well. One culture I created shrugged their shoulders to say "yes." Another race may greet newcomers by striking them to test their patience. Another may require that all males remain silent and let the women do the talking, while another race may laugh when sad or spit when happy.

Imagine running into a totally alien vessel. Your vessel hails it, but it fires a beam of charged photons back at you, crippling your ship. Later, you find out that it was merely sending back a friendly message. The use of physics and technology can vary from race to race. Not all extraterrestrials breathe oxygen or come from carbon-based life. Some races may be totally blind, have no nervous systems, or be genderless.

Confuse the players! An ugly race may fight a handsome race, with the ugly race being the good guys. Trap the players with their own preconceived notions. A race of blind quadriplegics may be powerful telepaths. A handsome, Adonis-like people may be deathly afraid of tiny wounds.

A hilarious example of this occurred when the U.S.S. ***Valiant*** made first contact with a race called the Igresh, who were horrendously ugly and smelled ten times worse than they looked. Contact teams met to talk, and the Igresh offered the crew a favorite Igresh drink that refreshed the body. One brave soul, Chief Navigator Nat Zar, drank it for the sake of galactic friendship. Suddenly, every gland, duct, and organ that produced any sort of fluid began operating at an accelerated rate. The liquid was cleaning out all impurities from his system. The poor fellow was in terrible straights, much to the horror of his ship mates and to the innocent delight of the Igresh. Commander Zar survived and, after changing his uniform, was in perfect shape.

During the old television series, money was saved by using old props from movies. The U.S.S. ***Enterprise*** ran into cultures that resembled different terrestrial historical periods. Ancient Rome, Nazi Germany, the Roaring 20s, and American Indians were all represented in the series. Though the GM does not have to worry about budget problems, no campaign would be complete without running into a dozen different human races placed on various planets by the Preservers. Imagine running into cultures descended from the Vikings, feudal Japan, ancient Egypt, 17th-century America, the Incas, or even an exact counterpart of Earth, complete with World War II raging. If the players know what's good for them, they'll remember the Prime Directive and not attempt to tamper. Alternate histories could provide a nice twist—but what about a civilization where the Nazis won World War II? Would it be considered tampering to try to do something about that?

The restraints imposed on the crew by Starfleet Command should present the players with ethical dilemmas. A planet with technology similar to 1988 Earth is about to launch a thermonuclear war. Should you stop it? How about a planet where one race is enslaved to another?

To make matters tougher, throw in some unprincipled Klingons. The Klingons and the PCs might both try to get a planet to join their sides. A classic scenario to be sure, but it can hold enough variation to make each encounter exciting. Avoid predictability. In the previously mentioned Igresh contact, the Klingons were involved in local politics, as were two other new races. At one point, the crew of the U.S.S. ***Valiant*** and some Klingons had to team up for survival!

Starfleet officers should consider violence only as a last resort, fighting only when there is no other alternative. To some gamers, this is boring, because it reduces the "action." But the spirit of ***Star Trek*** is the challenge of exploring the unknown. The enemy may be a hostile virus that the PCs must learn to cure, or an abnormality in space that traps vessels and warps time. There should be action—firing phasers and photons, or landing parties fighting with Klingons—but this shouldn't be commonplace.

Above all, try to maintain continuity with the series and movies. Starfleet does not send out vessels to blow up Klingon outposts, and Vulcans do not advocate war with the Orions. Certainly, you can set up bizarre situations like a dozen Spacedocks, vessels that travel at Warp 16, and plaid Romulans, but the campaign rapidly loses its ***Star Trek*** flavor. The GM becomes obligated to outdo himself until the crew saves the universe every gaming session and the game becomes an unrecognizable mutation of the original product.

If you have unruly PCs, Starfleet Command does an admirable job of keeping the crew in place. When crew members start breaking laws, court-martials can remedy this. Does the Captain pretty much do what he pleases? One Board of Inquiry later, the First Officer may be in command while the ex-Captain mines borite. Sure, Captain Kirk got away with a lot, but Kirk is also a Starfleet legend, and the fourth movie showed that even a legend can be put on trial.

Another great tactic is to have a stable PC play Chief Medical Officer, and if he sees the Captain behaving erratically, have the Captain declared incompetent. Of course, the GM could always kill a PC, but that is hardly sporting. Infecting him with a horribly contagious disease for the duration of the adventure may be a good warning, though.

Just how dangerous should an adventure be? Obviously, you don't want to pit your PCs' Nelson-class scout against a Klingon L-24 battleship, but a mission to Deneb to deliver some flowers to a Deltan ambassador seems a bit tame. Find the middle ground. An element of the unusual can throw the players off guard and make for a rewarding session. The aforementioned mission to deliver flowers is quite boring, but what if the flowers were sentient, 9' tall, and telepathic? Furthermore, what if another race in the Federation wanted the flowers badly enough that it tried to steal them?

Each adventure should have an element of risk or it ceases to be fun. Present the problem clearly, and throw in some twists to the plot. Provide more than one solution, but make the crew work to find them. Should a PC's life be threatened, give him a Luck roll; only if the roll is failed does the PC die. Even in fatal situations, make sure the threat is logical. A squad of Klingon marines is not going to overlook the Starfleet security men in battle armor in favor of killing the wimpy communications officer 45 meters from the melee!

NPC crew should generally be the first targets in a firefight. If there are more enemy NPCs than friendly NPCs, then the PCs, too, should be counted as legitimate targets. Players who try to hide behind the NPCs may be charged with conduct unbecoming to officers and should be zapped on principle. A Klingon may bypass an NPC as a target if the PC is more of a threat. In short, treat combat situations with fairness and logic.

Inevitably, a PC may die. Any self-respecting player will accept such a fate if there was at least a fighting chance to avoid it. There should rarely be ***Kobayashi Maru*** scenarios in the game—don't stack the deck so that the PCs cannot win or escape.

If you really need ideas, here are the two most off-the-wall gaming suggestions that I have ever created. The first one has been used; the other will not be used as long as my players behave.

First, imagine finding an Earthlike planet where the Preservers have placed a group of humans whose technology level is similar to 11th century Britain. The Preservers performed gene-splicing experiments and created beasts that were half man and half horse, as well as winged horses, eagle-headed winged lions, etc. They also genetically created short humans with lots of facial hair and a talent for mining, and another human type with slim build, fair hair, and a 90% resistance to ***sleep*** and ***charm*** spells. Sound familiar?

Second, imagine having the PCs find a planet where a certain bloated, octopoid-headed, insane deity and his flying fungus friends reside. Your players will go insane over this one.

How to hassle heroes

If an adventure involves conflict with another starfaring race, there are certain rules of thumb that should be followed, depending on which race is encountered; these helpful generalizations follow. Bear in mind that just because someone is a Klingon, his behavior is not completely predictable. To automatically assume that a Romulan will be honorable or that a Klingon will be violent is a deadly mistake. Encourage the players to regard each NPC individually rather than to make assumptions based on race. In fact, this is not a bad philosophy for real life, and there have been many instances when ***Star Trek*** episodes told a story with a moral

First, guidelines on Klingons. As seen in the old series and in the movies, Klingons are indeed a brutal, violent race. But please bear in mind that they are not stupid! No race achieves warp capability and an empire by being morons. Klingons are honorable, but usually only to fellow Klingons or, at the very best, to people who are clearly brave warriors.

There are rivalries between different Klingon family lines, but such conflicts are put aside when the families are faced with a common threat. There have even been incidents where Klingons and humans have cooperated. As the Klingons say: "Only a fool fights in a burning house."

As a rule, Klingon vessels travel in groups of three. If the Klingons are in orbit around a planet before PCs arrive, two vessels will be on the opposite side of the planet, in a "sensor shadow." The PCs will only detect one vessel, while the other two lurk behind, waiting for the moment to strike. Remember, Klingons love negotiating from a position of strength!

The Romulans are a different case altogether. They are a proud, honorable people who seem to have more integrity than the Klingons do. They fight not because they wish to, but because of the necessity for them to expand. Their systems are poor in resources, and they need to survive. With Romulans, conflict is less personal. Nevertheless, they are tough, violent opponents who would rather die than surrender. They might even be described as noble. Their use of the cloaking device is a bit less noble, but to the Romulans it does the job. Romulans are the perfect race to use for a secret incursion into Federation space. Their tactics have more finesse than those of the Klingons. Few things are more disturbing than having three Romulan Stormbirds materialize with weapons charged around the campaign vessel.

Orions are accomplished merchants, pirates, rogues, entrepreneurs, and troublemakers. They walk a fine line between the UFP and the Klingons. They are materialists but, again, are not stupid. In fact, they are downright devious. If any opponent should be allowed to escape to fight another day, it should be the Orions. Then there are those green Orion women. . . .

The Gorn are big, lizardlike brutes who hiss a lot and look very mean (with good reason, since they *are* mean). Gorn are divided into clans, and currently some clans are in rebellion against the Gorn Alliance. Some of the rebellion is due to the Gorn stance on the UFP. The rebels favor war and the Alliance favors negotiation. Therefore, the possibility of running into rebel Gorn vessels always exists. Gorn also have a code of honor, since they are a warrior race, but they lack finesse and subtlety. Their tactics are blunt and involve much violence, as witnessed in the ***Star Trek*** episode, "The Arena." Their engineering theory seems to be "If it's stuck, push it. If it fails to move, get a bigger hammer. If it breaks, it needed to be fixed anyway." Like the Klingons, they are by no means idiots, or they would not have developed warp drive.

As for homemade races, the limits are those of your own imagination. Make sure that there are logical reasons for certain behavior or standards. For example, a race that is recovering from a technologically inspired global war may harbor a strong hatred toward technology and those who use it.

When designing adventures, remember that the PCs have great resources at their disposal. A nemesis can't sneak up on a group that always carries tricorders. A transporter breakdown still leaves shuttlecraft. Medicine is so advanced that even somebody who has a current operational endurance of - 45 can still pull through if a Federation-style sick bay is handy. The computers on a starship contain more information than the Library of Congress and are at the PCs' fingertips. Some farsighted parties equip themselves with subcutaneous transponders so the ship can always find them.

Avoid using the same plot devices for limiting the PCs options. How many ion storms can "just happen" to be in the area, rendering transporters inoperative? How many lifeforms are so radically different that they do not show up on sensors? Know your players and how they think. Look for weaknesses, and play those weaknesses against the group. Learn what buttons to push with specific players. Do you have a player with an inflated ego? Have an NPC push him around. Does another player get nervous around Klingons? Bring 'em on! Players who are terrified of command should find themselves suddenly left in command because of unusual circumstances.

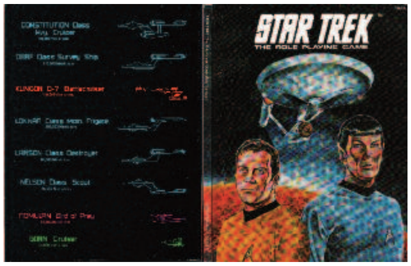
Engineering department

No, this has nothing to do with playing Mr. Scott. There are certain rules-related odds and ends that need addressing before you start a STAR TREK campaign.

First, there are Action Points, or APs. According to the rules, the GM is supposed to track each PC's APs, since there's often the chance the PC can perform certain actions during another PC's turn. Such actions are called opportunity ***actions.***

I advise you to throw out most of the AP system. Have you ever tried to keep track of a dozen Klingon Marines and a dozen PCs in a melee? There's far too much accounting involved. Instead, make everything more abstract. Let the PC or NPC with the highest Small Unit Tactics score go first, as per the rules. Discard the opportunity actions, but allow PCs to do extra things that may be logical. Let each combatant have one (and only one) chance to attack each turn. Logic should dictate what someone can or cannot do, but it would be wise to keep the AP charts around as a guideline and a final arbiter.

The thing I find most irritating about the STAR TREK game rules is the lack of explanation for how long certain skills take to implement. Here's how we do it: When a skill roll is needed, say in Warp Drive Technology, the roll is made. This represents a "quick fix," a la Mr. Scott. Should the roll succeed, all is well. If it fails, then the PC can try again, but the results will not be certain for 2d10 minutes.



The same principle follows for looking up information or treating someone's wounds. When looking up information, roll the average of the PC's scores in Computer Operations and the respective subject.. If Commander Markell is looking up all incidences of Starfleet starship disappearances in Federation history, his Computer Operations and Federation Culture/History would be averaged to find the chance for him to locate the right entry in a timely fashion.

The rules for using a tricorder seem a bit vague. In one instance, the rules tell you to use Computer Operations; but tricorders are also referred to under Small Equipment Systems Operation. I suggest averaging the above two scores with the skill in the subject with which the PC is concerned. Thus, if Commander Decataur is scanning some ancient ruins, he would roll the average of his Computer Operations, Small Equipment Systems Operations, and Archaeology. Remember, the tricorder or sensor records information accurately. The player is rolling for his PC's ability to ***understand*** what is being recorded.

Some game systems that use skills have outstanding successes and critical failures. This, too, is an excellent idea. If the PC makes his roll by less than 5% of the skill, make it an outstanding success. If Commander Decataur's Warp Drive Technology skill is 80 and he rolls a 3, not only did he get the port warp engine working, he also coaxed two extra power units out of it for an hour. On the other hand, if the PC rolls 96-00, something terrible has happened. The degree of trouble escalates with the higher rolls. If someone has a skill of 99 and he rolls 00, he has failed and must roll again, this time with a -20 penalty. If he passes, there are no repercussions. If he fails again, it is a critical failure. The actions needed to correct a roll like this could be an adventure unto itself!

Finally, have you ever tried to resolve a 3-D chess game? Nowhere do the rules cover this. We've ad-libbed a nice little system where both opponents must roll lower than the average of their intelligences and their skill ratings, with the winner being the first one who makes it. If both make it, the winner is the person who rolled proportionately lower. If Dr. Voris, who has a score of 40, rolls 10, and Captain Anastas, who has a score of 20, rolls 8, Dr. Voris would win because 10 is 25% of 40, while 8 is 40% of 20, a considerably higher proportion. If someone rolls a critical failure at 3-D chess, feel free to ignore the consequences. After all, how can losing the game be deadly, unless the PC gets a pawn lodged up his nose by an angry loser? Now, if the PC is playing zero-gee lacrosse, a critical failure could mean a broken arm or a concussion. Incidentally, for resolving a sports contest, average the PC's skill and his dexterity. For resolving card games, average the game skill with his luck score.

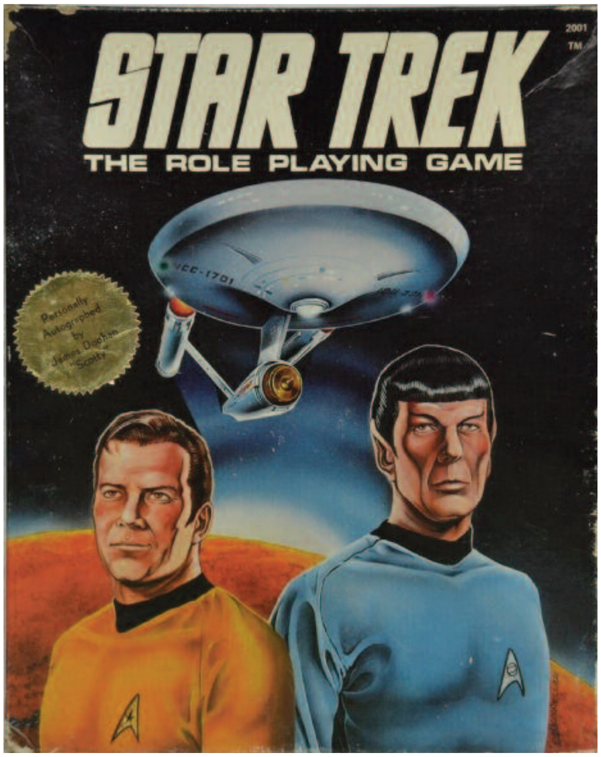
Miscellany

The STAR TREK game is not limited to a Starfleet-based campaign. There are sourcebooks for playing merchants and traders, or Starfleet Intelligence agents. Other sourcebooks are available that can allow a Klingon, Romulan, or Orion campaign. A Klingon campaign is definitely not like running a chaotic-evil or all-orc campaign in the AD&D® game! It seems to be a mixture of FASA's STAR TREK, West End Games' PARANOIA®, and TSR's TOP SECRET/S.I. game.

Be careful not to allow your STAR TREK campaign to lose its unique flavor so that the scenarios you design could be mistaken for something involving different RPGs (i.e., "generic module blandness"). Use STAR TREK terminology and historical references, and above all, keep the spirit of exploring strange new worlds and seeking out new life and new civilizations alive. Many episodes were morality plays. While these may be hard to incorporate in the game, simple lessons like "violence is not always necessary," "machines cannot and must not replace man," and "don't judge by outward appearances" can be woven into scenarios.

Finally, avoid repetition. Just how many corrupt Starfleet Admirals are running around? How many times can the existence of the entire galaxy be threatened, only to be saved by the same group of heroes time and time again? Keep your players guessing as to what sort of adventure is coming next. Will it be a delicate diplomatic mission or an undercover assignment? Adventures could even happen during shore leave, when the players least expect it. "Where no one has gone before" leaves a lot of territory to cover.

This article is dedicated to the following people, who stump me at every turn so that I have to come up with better and trickier adventures: Sophia Biedel, Beth Bigelow, Kim Calabrese, Joel and Judd Emery, Jamie Hale, Kevin McBride, Milton McGorrill, John Rennie, Nick Rowe, Anthony Scappichio, Ellen Terra, Bryan Villarreal, Kevin Wells, Colleen and Dave Wetzel, and Bow Worsham. Live long and prosper! Ω



Quite an excellent summation, there!
My only addition is to also consider the era of the show or film gamed. TOS was gone a month before Apollo 11 landed on the Moon. Satellite imagery on our phone today was special rocket launch by very few top-government agencies back then. Their understanding of computers was similar and yet very different to ours. Our 9/11 Security State was precluded by their 1990's Eugenics Wars. It is Kor in Errand of Mercy who states Klingons are strong as they are always under surveillence. It is Kirk who states detailed visual records were never kept in Pike's time, but are kept by Ben Finney's day, though only in key areas as it is Scotty setting up a massive camera lens for the wedding in Balance of Terror. Security on 1701 is lax at best by even naive understandings today.

I encourage you to embrace these mindsets in your games. When a player says "I should be able to do this, I can do it on my phone now!" You can reply, "Right. You didn't live through a Eugenics War in the 1990's that precluded your phone's existence today or the PC's history."

- Jack Photon

ROLE PLAYING IN THE FINAL FRONTIER

By **Fantasimulation Associates**

Editor's Introduction: Because many of our readers are unfamiliar with or new at role-playing games, the following will serve as an introduction. For those of us with some experience, it also offers a fairly interesting scenario written up in an unusual form.

"Captain's Log: Stardate 7744.6

In response to orders from Star Fleet Command Headquarters in this sector, the *Enterprise* is approaching the Tareel star system. According to her last subspace transmission, scout vessel *Xanadu* intended to perform a preliminary survey of the third planet of this system. *Xanadu* has since failed to make any of its scheduled subspace reports. The *Enterprise's* mission: Investigate the *Xanadu's* disappearance."

Captain James Kirk touched a button on the arm of his command chair, and the *Enterprise's* computer silently entered his remarks in the starship's electronic log, as it had done thousands of times before.

The huge main viewscreen displayed a single disk, growing larger against the panorama of stars. "Tareel III dead ahead, Captain," Lt. Sulu reported from the Helmsman's chair.

"Approach with caution, Lieutenant," Kirk ordered. "Bring us into a wide parabolic pass. I want a quick sweep with sensors before committing to standard orbit."

Sulu's fingers deftly manipulated controls, executing the order as Kirk turned his command chair toward the communication station. "Any luck with raising the *Xanadu*, Lt. Uhura?"

The lovely Communications Officer shook her head. "No response on any band, sir, and I've been trying ever since we came in range of the system. If the *Xanadu* is out there, she isn't talking."

Next to Uhura, Science Officer Spock stood peering into the sensor hood at his station. "Preliminary sensor scans show no signs of a starship, but it could be in sensor shadow, orbiting on the far side of Tareel III." The tall Vulcan officer turned from the scanner toward the Captain. "I assume," he continued, "that is the reason for the fast parabolic orbital pass."

Kirk smiled. "You assume correctly, Mr. Spock. If there's a ship in orbit here, we'll know soon enough. If not..."

Kirk's next words were cut off by a persistent beeping from the science console. Spock quickly turned back to the sensor hood. "A contact in orbit, Captain, large enough to be a starship." Spock hesitated, fine-tuning the sensor lock. "Too large for the *Xanadu*. Power output level and type consistent with that of a Klingon warship."

"Now in visual range, Captain," reported Ensign Chekov from the Navigator's station. "And there he is! Shall I raise shields, sir?"

"Not yet, Mr. Chekov," Kirk replied quickly. "This is unclaimed space. He's got as much right here as we do."

"Captain!" Lt. Uhura called urgently. "I'm getting a transmission from the Klingon vessel."

"Put it on visual, Lieutenant," Kirk ordered. A moment later, the face of a Klingon commander appeared on the main viewscreen.

"Federation vessel, identify yourself," the commander snarled. "You are intruding upon an operation of the Klingon High Command."

Kirk gestured to Uhura to open communications to the Klingon ship. "This is Captain James T. Kirk of the *USS Enterprise*. We are proceeding on a search and rescue operation in this area. Identify your vessel and intent."

The Klingon frowned. "Search and rescue, indeed. Search and destroy is more likely. I am Captain Klavan of the cruiser *Obedience*. Your presence here is extremely suspicious at this time, *Enterprise*. We suspect an Imperial Klingon scoutcraft has been waylaid in this area. Enter standard orbit and prepare to be boarded."

Kirk's voice was even but stern as he replied. "We have lost a scoutcraft as well, and are now searching for that vessel. This is an unclaimed system, and we do not recognize your right to board. Your 'request' is denied, Captain."

"Your excuse is glib, but too convenient and all too transparent, Earther. Prepare for boarding or battle!" The transmission ended abruptly.

From the science station came the calm voice of Mr. Spock. "His shields are going up, Captain."

Chekov's voice, in counterpoint, betrayed his excited state. "He's accelerating out of orbit, sir! He's coming straight for us!"

The entire bridge crew awaited Kirk's next order.

In a dramatic series like *STAR TREK*, decisions made by the Captain and crew of the *USS Enterprise* are what create the excitement. What fan would not want the chance to control the helm of a mighty starship, have mankind's knowledge at his fingertips in the ship's computer, or perhaps even sit in the command chair and match wits and your crew's expertise against the dangers and excitement of man's final frontier?

With ***STAR TREK*: The Role Playing Game, Second Edition**, players can discover whether they have what it takes to be a Star Fleet officer. The game provides rules, background, and materials for a unique form of cooperative pastime where you and your friends can put yourselves in the place of the famous crew of the *Enterprise*, or create your own starship for adventures in the *STAR TREK* universe. And the fun does not end there. You are not limited to Star Fleet player characters. Additional supplements allow you to play a wide-ranging group of characters such as Klingons, Romulans, or merchant traders.

A role-playing game is different from a boardgame or card game. In this special kind of simulation, you are not a single player competing against others toward a specific goal. Instead, you and your fellow players cooperate in a sophisticated game of 'Let's Pretend.' You become the characters of *Enterprise* crewmen, or new characters you create yourself, trying to think as they think and react as they react. Your success in the game is largely determined by how well you 'get inside the head' of your character and make decisions based on the character's personality and capabilities, rather than your own.

The operations of the game are moderated by a referee called the gamemaster. The gamemaster starts out as a sort of scriptwriter for your episode of *STAR TREK*. He creates an adventure background and sets the stage for the entrance of your characters. Unlike a script for a TV show, however, you have no set lines or actions. The gamemaster presents the situation and tells you what your character sees and hears, but it is up to you to make decisions on what the character will do or say. As in *STAR TREK*, the safety of your imaginary crew, and of the United Federation of Planets, may well hang on your decisions.

Your adventure takes place in the imagination of the players and the gamemaster. Cardboard counters, or lead miniature figures, representing individual characters are sometimes moved on mapboards representing adventure locations in order to aid in resolving situations between individuals. Starship combat can also involve cardboard markers, or miniature models, representing ships; and a unique set of control panels provided for the important starship crew members represent the control of movement, weapons, and defenses of the ship.

"Raise the shields, Mr. Chekov," snapped Kirk. "Mr. Sulu, veer off. Make us a difficult target." Both men quickly complied, and the huge starship veered away from the rapidly closing Klingon war vessel.

The young Russian Ensign turned to Kirk, confusion in his voice. "We aren't going to run, are we, Captain?"

Kirk shook his head grimly. "We aren't running, Ensign. But I'm not going to let Captain Klavan choose how this meeting proceeds. We'll fight, my way."

"He's closing to disruptor range, Captain," Sulu reported.

"Mr. Chekov," Kirk addressed the eager Ensign. "Give us all the power you can to the rear shields. We'll probably take fire." Kirk tapped his command intercom. "Mr. Scott, this is the Captain," he said softly.

A familiar brogue issued from the intercom speaker. "Aye, sir. I've been monitoring bridge traffic. Are we to show 'im our tail?"

Kirk grinned, knowing his Engineer's feelings about Klingon arrogance. "Only till we show him our teeth, Scotty. Be prepared for some tight maneuvers. We'll need all the power you can spare us for phasers when he passes."

"Och, I gie the idea now. We'll be ready," Scott replied with a chuckle. "Engine room out."

"He's coming within range, sir," Chekov reported. "He'll fire any moment."

"Be ready, Mr. Sulu. When he fires, take it on the rear shields, then cease forward acceleration and bring 'er 'round hard to starboard. Fire as he shows us his rear shields."

Sulu suddenly realized what Kirk intended to do. "I understand, Captain."

"He's firing now," interjected Spock. The next moment the ship rocked slightly as the disruptor fire struck the shields. The rapidly accelerating Klingon ship shot past the *Enterprise*.

Kirk nodded toward the waiting Helmsman. "Now, Mr. Sulu!"

'Engineer Scott' looks at his control panel and reports power allocation to the other players. 'Chekov' had previously established the strong rear shields that protected them from Klingon fire. This phase 'Sulu' will be turning the ship, so 'Chekov's' player changes the settings, putting most of the power into the forward deflectors.

'Sulu' notes the power available for the maneuver: plenty for what the 'Captain' had ordered. He then turns his attention to weaponry, concentrating the available power in the forward phaser banks, energizing them to full capacity.

'Spock' rolls the dice, trying for a result lower than his character's rating in *Starship Sensors*. The roll is successful. "I'm scanning the Klingon's shielding, and I made my sensor Skill Roll," the player tells the gamemaster. "What does Spock find out?"

The gamemaster consults his own panel, which displays the Klingon ship's status. "As expected, Spock finds the rear shields are very low. The Klingon Captain did not expect you to maneuver behind him, and reinforced his forward shields instead."

The 'Spock' player reports this fact to 'Kirk'. "Very good, Mr. Spock," replies the 'Kirk' player. "Mr. Sulu, execute the maneuver and fire at will."

'Sulu' reaches for the cardboard spacecraft counter resting on a starfield map superimposed with a hexagonal grid. He moves the counter one hex to the right and turns it a bit. The gamemaster moves the Klingon ship one hex straight forward. 'Sulu' continues rotating his ship counter as he moves it another hex. The Klingon ship moves another hex forward, passing the *Enterprise* counter. 'Sulu' moves again and rotates the counter. The *Enterprise* silhouette on the counter now faces the rear of the Klingon ship. "I'm firing forward phaser banks now," he states.

'Sulu' consults a chart on his control console, then rolls a ten-sided die. "A hit," he reports excitedly, "for a total of 20 damage points!"

The gamemaster checks his panel. "Ouch! Right in the rear shields, too." He moves a couple of counters on his control panel, which is shielded from the 'crew's' view by a notebook propped open in front of it.

The 'Spock' player rolls the dice again. "I already have a sensor lock on that ship, and I just successfully made another Skill Roll. What kind of damage did the Klingon take?"

"His warp engines are heavily-damaged, with a large subsequent drop in available power," reports the gamemaster.

After another couple turns of action, the Klingon ship, too badly damaged to put up a fight, limps away. The 'Kirk' player decides not to follow.

"We're not going to pursue, sir?" The young Navigator was puzzled again.

"Negative, Mr. Chekov. We've established our credentials in this matter. Our first concern is our mission, and I believe Captain Klavan was telling the truth about losing a ship out this way."

The Vulcan Science Officer raised an eyebrow. "Based on what evidence, Captain? Klingon officers are not noted for their veracity."

Kirk smiled. "Just a hunch, Mr. Spock. A feeling. Intuition."

Spock shook his head. "Illogical," he murmured.

"Perhaps," agreed Captain Kirk. "Do you recommend otherwise?"

"No, Captain. I am aware that human intuition has proven valuable in the past, particularly when voiced by an experienced and skilled commander." Kirk knew that was the closest thing to an expression of faith he could ever hope to get out of his First Officer. Spock, nevertheless, had faith in his commander, even though Vulcan philosophy had no expression for it.

"Bring us back on course for the planet," Kirk ordered. "Enter a standard orbit, Mr. Sulu. Mr. Spock, scan the planet's surface and look for anything that might tell us more about what happened to the *Xanadu*."

"Aye, aye, sir."

The 'Kirk' player sat back in his chair, notepad in hand. "Okay, suppose you tell us what Mr. Spock's sensor scans of the planet reveal."

The gamemaster consults his notes. "Spock had better make a Skill Roll against his rating in *Starship Sensors* first," he says.

'Spock' picks up the dice and rolls a number well under his *Starship Sensors* Skill Rating. "There it is," he says. "What do I find?"

The gamemaster hands 'Spock' a map. "This is the central continent of one hemisphere. Conditions are Terra-like, for the most part, though the atmosphere is a bit thin."

"Perhaps for some of us," interjects the 'Spock' player.

"Yes, Mr. Spock will feel right at home in that regard," the gamemaster admits, "though the temperature is closer to Earth's than Vulcan's. Your sensors indicate the ruins of several large buildings, about two-thirds of the way up the eastern coast, as well as large concentrations of metal that *could* be the remains of several downed spacecraft."

"*Several* spacecraft?" The 'Sulu' player looks up from the map excitedly. "Maybe we've found the missing Klingon scout as well as our own."

"Maybe so," 'Kirk' reflects. "Right now, I'm mostly wondering what brought them down in the first place."

The gamemaster smiles evilly and rolls dice behind his open notebook. "I'm so glad you asked!"

The *Enterprise* lurched suddenly, as if shaken by a gigantic hand. Kirk hung on to his command chair as the ship's computers automatically adjusted the artificial gravity to compensate.

"We're under attack!" Ensign Chekov shouted, surprised by the sudden movement. He had fallen to the floor momentarily before scrambling to his feet at his station.

Spock kept his feet, and ducked his head to look into the sensor hood. "Negative, Ensign. We are being gripped by an excessively strong tractor beam."

"Chekov, get the shields up," Kirk ordered swiftly. "Sulu, leave orbit. Get us out of that beam's range."

Sulu operated the helm controls with deft, experienced hands. The great ship shuddered as it fought the pull of the tractor beam and tried to manuever out of orbit.

"No good, Captain," Sulu called, the strain showing only slightly in his voice. "There's not enough power."

"Captain," Mr. Spock interjected in his usual firm, even voice. "Sensors indicate that shields seem to be ineffective in this instance. Might I suggest dropping them and diverting the power for use by the Helm in maneuvering?"

Kirk switched on his intercom instead of replying. "Scotty!"

"Scott here," came the immediate answer from the speaker. "What have ye got pullin' us by the tail, Cap'n?"

"Tractor beam from the planet," Kirk replied. "We need more power to the Helm, fast."

"Ye are already gettin' all my wee bairns can gie ye, sir."

"Can you cross-connect from the shields, Mr. Scott? We haven't much time."

"Aye, sir," Scott replied. "At least we can gie it a go."

The 'Scotty' player scans his control panel. He moves the shield allocation marker back to zero and raises the marker showing maneuver power a like amount. "You've got it," he says.

The gamemaster nods to the 'Sulu' player. "Now you need a successful Skill Roll against your rating in *Starship Helm Operations*," he informs the player.

'Sulu' picks up the dice and rolls a 19, well under his Skill Rating. "Made it," he calls delightedly.

"All right," the gamemaster continues. "You begin to pull away from the tractor beam. At a distance of 1,000 kilometers from your standard orbital height, the tractor beam abruptly shuts off."

"Establish a stable orbit at this altitude, then," the 'Kirk' player orders. "Are we still within transporter range?"

The gamemaster shakes his head. "Not at this extreme orbital distance."

The players briefly discuss the situation among themselves. "All right," 'Kirk' says finally. "We'll establish an elliptical orbit that will drop down briefly within transporter range of the buildings we spotted. Meanwhile, we'll get a landing party together and check out that tractor beam at the source."

After a short briefing, Kirk met Spock, Chekov, and two security officers in the Transporter Room. Scotty was setting the controls as the Security Chief handed out Phaser II pistols and communicators.

Spock filled in the landing party on the current planetary situation. "Our best sensor scans can get little information at this distance. We have, however, detected life readings near two different large metallic objects in the target area. Not knowing which is likely to be the *Xanadu*, I have instructed Mr. Scott to beam us down near the smaller of the two."

"Why the smaller object, Mr. Spock?" asked Chekov.

Kirk smiled. "An exercise for the student, Ensign. You speculate why Spock chose the small object."

Chekov hesitated thoughtfully. "Perhaps because, if both objects are recently-downed ships, ours and the Klingons', ours is likely to be the smaller vessel?"

Spock nodded. "Precisely, Ensign. Even if it is not the missing Federation ship, it is logical to wish to beam down near the smallest concentration of strangers. It is a very fine distinction."

"However," Kirk said. "Mr. Spock's fine distinctions have saved our necks more than once." Kirk turned towards the console. "Scotty, how soon till we are in range for transport?"

"Just another minute or two, sir. You gentlemen may take your places on the platform."

As the party headed for the platform, the door slid open and Dr. McCoy entered, tucking a small medical pouch under the back of his uniform shirt. "Wait for me, Jim," he called, joining the others on the transporter platform.

Kirk looked at him quizzically. "Bones, I didn't assign you to this landing party."

"I'm assigning myself, Captain," McCoy insisted. "Heaven knows I'm not fond of scattering my molecules across space in this contraption, but if the *Xanadu* was forced down, as you speculate, there may be injured people down there." McCoy cast an amused glance at Spock. "Besides," the doctor continued, "You never can tell when Spock will get a headache from splitting logical hairs."

Spock fixed McCoy with a puzzled stare. "Doctor, I fail to see the relevance of a discussion of injured follicles..."

"Never mind," Kirk interrupted, impatience winning out over amusement. "When you're ready, Scotty. Energize."

With a high-pitched droning sound and an electronic sparkle, the landing party faded away.

"All right, you sparkle and fade, and reappear here..." The gamemaster places a small square-grid map on the table, placing six colored counters representing the landing party in a small grouping.

"This over to your left is a small Federation scoutcraft, heavily damaged." The gamemaster notes one large shape on the map.

"My compliments to your deductive abilities, Mr. Spock," the 'Kirk' player states with a smile. "Right on target."

The gamemaster continues his description. "A voice to your left calls out to you. When you look, you see a man in a Star Fleet uniform with his arm in a sling. He is waving frantically with his other arm." A new counter is placed on the map, near the tail of the scoutcraft.

"We'll move in that direction," the 'Kirk' player tells the gamemaster.

"As you approach, you hear the whine of disruptor fire behind you." The gamemaster rolls the dice behind his notebook, then continues. "The shot struck at your feet."

The 'Kirk' player hastily moves counters. "We'll dive for cover behind the ship."

"The injured Star Fleet officer draws a phaser and covers your retreat by laying down suppressing fire." The gamemaster rolls the dice once more, and consults hidden notes. "He doesn't hit anything, but he slows up the Klingons. You all make it safely."

Kirk, his own phaser drawn, peeked around the damaged stern section of the scoutship. He saw shadowed figures ducking down behind the remains of a small Klingon vessel. Satisfied that no further attack was imminent, he turned to the injured officer.

The young officer wore the sleeve stripes of a Lieutenant Commander on a gold command division shirt. His left arm was supported in a crude sling as he holstered his phaser with the other hand. "Good to see you, sir." The officer glanced at Kirk's chest insignia and sleeve stripes. "*Enterprise* insignia... You must be Captain James Kirk."

Kirk was slightly embarrassed by the young officer's tone of deference, tinged with more than a bit of awe. They shook hands solemnly. "I'm Kirk. You are with the *Xanadu* scout party?"

"Lt. Commander Thaddeus Cosgrove, First Officer, I would surmise," interjected Spock. Kirk glanced at his First Officer, surprised. "Before leaving the *Enterprise*, I, of course, checked the personnel records of the *Xanadu*."

"Commander Spock's reputation proceeds him as well," Cosgrove continued. He was obviously aware of Vulcan customs, since he greeted the *Enterprise* Science Officer with a nod of greeting, not a handshake.

Dr. McCoy approached, medical scanner in hand. He passed it over Cosgrove's bandaged arm. "Compound fracture. Happen in the crash?"

Cosgrove nodded. "Yes, sir, but I'm able to handle it for now. Better you should look after Doc Wagner. She's banged up pretty bad. Follow me, if you would, sirs."

On the opposite side of the damaged vessel, three other Star Fleet crewmen waited, phasers drawn. A fourth, a woman in her mid-forties, lay on a pile of blankets against the side of the ship. Dr. McCoy immediately moved to help the injured woman, followed by Cosgrove.

An older man in command uniform greeted Kirk's party. "Commander George Lorenzo of the *Xanadu*," he announced. "This is Lt. Del Rey and Ensign Corben."

Kirk introduced himself and his officers. Upon finding that two other crash survivors were manning observation posts to watch the Klingons, he dispatched the two *Enterprise* security officers to join them.

Commander Lorenzo explained how his ship had been forced down by the tractor beam. "We found out the beam is apparently automated, controlled from the central building beyond the Klingon ship. When we tried to get in, we were attacked by a force of robotic guard mechanisms. That's when Doc Wagner caught a stray beam.

"We retreated and were regrouping for another go at it when Sparks M'narrn, our Science Officer, detected the Klingon ship coming into orbit. Our main communication gear was damaged in the crash, but we managed a short-range job and tried to warn the Klingons. The blasted thing burned out on us before we could convince them, and then they were caught too." He shook his head ruefully. "Naturally, the Klingons who survived blamed us. They attacked as soon as they could dig out of the wreckage, but we held them off. Beside the two on guard duty, we're all that's left. Seven others didn't live through the crash landing."

"It's a miracle any of you made it," Chekov observed. "If I may say so, sir, that must have been some mighty fine piloting you did."

Lorenzo managed a small smile at Chekov. "Thanks, son. I wish it had been a bit better, for my comrades' sake."

McCoy then approached the group. "It's not good, Jim. She's pretty badly hurt. Damage looks like massive cellular disruption, what you might expect from a crude blaster-type weapon."

"For a crude device," Lorenzo offered, "those robot guards sure are efficient. Mostly, I suppose we were just out-numbered."

"Perhaps if we joined forces with the Klingons, we'd have a chance," Kirk suggested.

McCoy laughed. "I'd rather take my chances with robots. It's probably safer."

"They haven't listened to any of our proposals for cooperation," Lt. Del Rey advised the group. "They just ignore us when they aren't shooting at us. Can't your ship just beam us out of here?"

Kirk quickly explained their difficulty. "The *Enterprise* will make another close pass in three hours. We need to be ready then."

"Dr. Wagner's condition is too delicate to wait three hours, Jim," McCoy said anxiously. "We have to knock out that tractor beam sooner, so I can get her to the *Enterprise* ahead of schedule."

"Gentlemen," Kirk offered, "this calls for a bit of old-fashioned diplomacy."

The players again discuss the situation briefly among themselves. "All right," says the 'Kirk' player finally. "We'll call out to the Klingons."

The gamemaster imitates a gruff, low-pitched voice. "What do you want, Earther?"

"This is Captain Kirk of the *Enterprise*," the 'Kirk' player replies. "Can I speak to your commander?"

The gamemaster continues with a harsh laugh. "The *Enterprise*? Well, well now. I am Commander Krava. Have you further treachery to plot, Kirk?"

"No tricks, Commander. I'd just like to discuss our mutual distress, man to man. I'll meet you alone and unarmed, halfway."

The gamemaster grins, which makes the 'Kirk' player a bit nervous. "Very well, Kirk. Unarmed and alone, behind the small green building to your left."

The 'Kirk' player looks at the map and finds the building referred to by the gamemaster's Klingon commander. The area behind it is out of the direct view of both ships, and seems like a safe enough place to meet and still avoid ambush. "Agreed, Commander. Five minutes."

"This is a big mistake, Jim," McCoy insisted, as Kirk prepared to leave for his meeting with Commander Krava. "We can't cover you from here if that Klingon decides to break the truce."

Kirk shrugged. "Do I have any choice, considering Dr. Wagner's condition?"

McCoy sighed. "No, not really," he admitted. "But I don't have to like it."

Kirk slapped his friend on the shoulder. "I'll be fine, Bones. Where's Spock?"

"He insisted on checking with the sentries again." McCoy looked thoughtful. "I wouldn't mind checking with that one Security Ensign myself, Ensign Lee. She's got a smile just like sunshine."

"Bones, did anyone ever tell you that your attitudes toward women are a bit archaic?"

McCoy gave Kirk a sarcastic look. "This from the great galactic womanizer, himself?" In a moment, McCoy was again solemn. "All kidding aside, Jim, be careful."

"I will."

Kirk rounded the small green building with care. The sun was low in the sky, and the building's irregular angles cast shadows that were perfect for an ambush. He was a bit early, hoping to arrive before the Klingon could get a position.

Suddenly, he saw the Klingon round the building from the other side. "Kirk," the Klingon called out cautiously. "Are you unarmed?"

Kirk stepped forward, showing empty hands. "I am. And you?"

The Klingon, satisfied, approached. "Of course, of course, Earther. A Klingon's word is his bond, as your people say."

"Well," Kirk observed as he greeted the Klingon commander, "that's not quite what we say."

With a rapid movement, the Klingon reached behind him and pulled out a disruptor pistol. "Stand very still, Earther. A Klingon trusts only what he can hold in his hand."

"Another similarity between us," Kirk said as he saw Spock step out of a shadowed area and grasp the Klingon's shoulder from behind.

The 'Spock' player consults his rulebook's chart describing the Vulcan nerve pinch, then rolls the dice. "Made it!" says the player with decidedly un-Vulcan excitement. He then quickly resumes character. "What happens?"

The gamemaster sighs. "The Klingon slumps to the ground, momentarily stunned. Nice maneuver."

"I'll grab his weapon," says the 'Kirk' player quickly. "Okay, Commander, start talking."

"You were supposed to come alone, Earther," the Klingon muttered peevishly as he rubbed his shoulder.

"I won't even dignify that with an answer, considering this disruptor, Commander," snapped Kirk. "What I want is cooperation, however, not a hostage." He shoved the disruptor pistol into the waistband of his uniform.

For a split second, the Klingon considered jumping Kirk, then looked at the Vulcan First Officer and thought better of it. After a few minutes of accusations, all countered by Kirk, the Klingon replied evenly, "Perhaps this will yet be the basis for a worthwhile alliance."

"Is everybody about ready?" The gamemaster seems impatient to get the assault on the central building started, and the players know that when the gamemaster is excited, it means things are not going to be as easy as they hoped.

The 'Kirk' player is confident. "I think we've got it all covered. Let's see, the smaller group, Spock, McCoy, and Ensign M'narrn from the *Xanadu*, will provide the diversion by setting off a phaser overload near the yellow building. When the robots investigate, Commander Krava and the Klingons will attack from the left, and our party will move in from the right. We ought to catch the robots in between with no cover."

The gamemaster looks thoughtful. "Perhaps," he says non-committally. "Who is going in your group?"

"Everyone except the diversionary party," 'Kirk' replies. "Oh, I almost forgot. Ensign Lee, the *Xanadu's* Security Officer, is staying behind to guard Dr. Wagner."

The 'McCoy' player looks skeptical. "Why isn't McCoy staying with his patient? Is he necessary for the diversion group?"

'Kirk' thinks for a moment before replying. "You're right," he agrees finally. "McCoy will stay behind with the injured Doctor. Lt. Del Rey will go with the diversion party instead."

"Now that you've settled everything," the gamemaster concludes, "set up your counters on the map for the combat sequence."

The players set up counters for their characters and the non-player characters of the *Xanadu* crew, whose actions they will control during the battle. Then they watch as the Gamemaster sets up the Klingon Commander and his forces, who in this instance will be cooperating (supposedly) with the players.

As the combat segment begins, the 'Kirk' player notices the gamemaster removing the Klingon Commander and his Lieutenant from the board. "Hey!" 'Kirk' calls indignantly. "Where are they going?"

The gamemaster smiles. "Oh, they took off just as the battle started."

"Figures," grumbles the 'Chekov' player. "Never trust a Klingon."

The combat sequence proceeds until the characters have taken the building and immobilized the robots. In combat situations like the one developed here, the gamemaster will provide a tactical map on a square grid of the combat area. In this case, the area involved is the central building of the alien complex.

As Kirk's party, the *Xanadu* survivors, and the Klingons move into the robot-guarded complex, they are represented by counters on the tactical map. A simple set of movement and action rules determine how and when the counters are moved and what actions each can take during a ten-second tactical game turn. The players choose the actions for their characters. In this instance, the Gamemaster allows the players to exercise control over the *Xanadu* crewmen and even the remaining Klingons, because they are cooperating (for now). The gamemaster chooses actions for the robotic guards.

When the Federation officers or Klingon crewmen fire, the players compare the character's already calculated To-Hit Roll with a 1-100 dice roll. Sometimes the roll is modified by conditions such as range, movement of the target, and so on. A hit is scored if the modified roll is equal to or less than the To-Hit Number of that particular character. The system is simple and easy for even the novice to master.

A well-placed shot from Chekov's phaser dispatched the last of the robot guards. "Nice shooting, Mister," called Kirk, as he approached the power room control panel.

"The shooting isn't finished, Earther!" called the gruff voice of the Klingon commander. Kirk turned to see Commander Krava enter the room, his disruptor pressed against the back of Ensign Sharon Lee of the *Xanadu*. Then McCoy also appeared, led by the disruptor-toting Klingon Lieutenant.

"Sorry, Jim," called McCoy. "They jumped us while we were tending to Dr. Wagner. We never had a chance."

"Now I see why you disappeared when the shooting started, Krava. You circled back to our camp."

"Where I found your so-called guard. Really, Kirk, you should be able to do better than this female. Your medical officer was occupied with his patient, and thus has some excuse, but this so-called Security Officer wouldn't last ten minutes in my ship. I would never have been able to sneak up on a man, even an Earthman, so easily. You will now all drop your weapons and – OOF!" The final interjection came as Ensign Lee's elbow found the pit of the Klingon's stomach. A moment later he was flying in an ungraceful arc to the floor, his disruptor in Ensign Lee's free hand.

McCoy's captor was so startled he never saw the Doctor's quick right cross coming. Anxious to make up for being surprised earlier, McCoy made the most of his opportunity and quickly subdued the Klingon Lieutenant.

"Don't try it!", Kirk called to the startled Klingons as he raised his phaser. The other Federation officers acted quickly, and the Klingons were covered before they had a chance to fire a shot. The young blonde woman covering Krava with his own disruptor couldn't repress a big smile of satisfaction and triumph.

"Nice work, Ensign," said Kirk with a grin. "I think there may be a commendation in this for you."

"There certainly will be," confirmed Commander Lorenzo. "Care for a self-defense lesson later, Captain? She's quadrant champion three years running."

The pretty blonde looked embarrassed. "It was nothing, sir. Sorry I let him get the drop on me in the first place."

"We all make mistakes, Ensign," Kirk said. "Krava will vouch for that, won't you, Commander?" Kirk pulled out his communicator and flipped the grid. "Kirk to *Enterprise*."

A familiar voice answered immediately. "Lt. Uhura here, Captain."

"Lieutenant, have the *Enterprise* brought around into standard orbit immediately. We have secured the area and will shut down the tractor beam. Inform sick bay that we have injured from the *Xanadu*. Have a full medical team beam down to where you dropped us off as soon as you are in range. We will meet them there. Kirk out."

Later, in sick bay, Kirk dropped in to check on Dr. Wagner's condition.

"She's doing just fine, Jim, now that we have her under proper treatment. I swear, doctors are the worst patients. Now that she is feeling better, I'm not sure just who is running things here," McCoy chuckled. "Cosgrove's arm knitted well, too. He'll be ready for duty by the time we reach Star Base Twelve."

"Speaking of which," Kirk said in a confidential tone, "are you still interested in getting better acquainted with Ensign Lee?"

McCoy looked skeptical. "Well, I don't know about that, Jim. Perhaps I'm a bit old for the lady after all."

"Bones!" Kirk was visibly surprised. "I never thought I'd hear you say that. Since when are you feeling your age where women are concerned?"

The Doctor looked uncomfortable. "Well, since she tossed Krava across the room. I'm a bit inhibited by women who could answer a pass by putting me in traction."

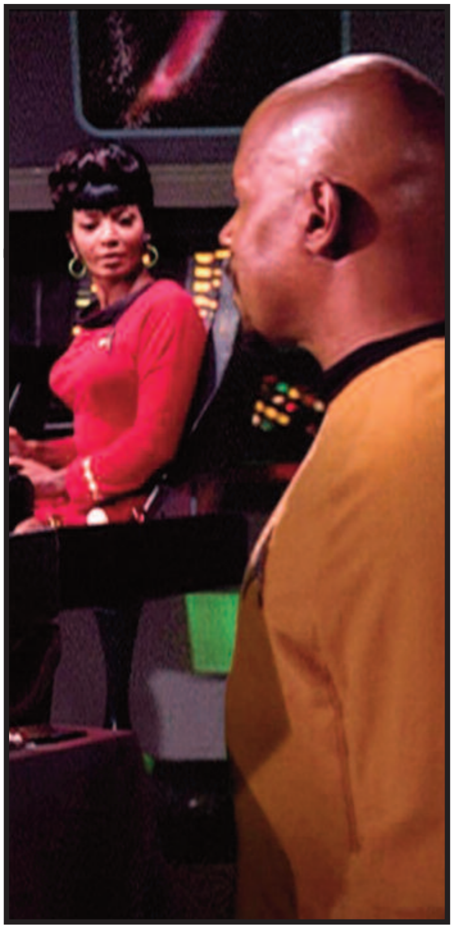
"Well, in that case, perhaps I'll offer to give her a little tour of the *Enterprise* myself," Kirk speculated. "I love a challenge."

"You're too late, Jim," McCoy informed him with a chuckle. "She was in here checking on Dr. Wagner a minute ago when Chekov stopped by and offered to give her the grand tour. They seemed quite taken with each other."

"Oh." Kirk stopped and shrugged. "Oh, well, then."

McCoy laughed. "Maybe we're both getting old, Jim! Come on in and meet my patient, anyway."

"We're not getting old, Bones," Kirk countered, as they walked toward the sick bay ward. "They're just making them very, very young these days." ■



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GAMING THE CAPTAIN

A Discussion of the Power and Priveledge of Command

by William A. Barton

One of the many experiences that I was looking forward to at Origins last year was the opportunity to play ***STAR TREK*: The Role Playing Game**. Up until then, I was always the gamemaster whenever our local group got together. I'd never had the chance to boldly go forth in the role of one of my favorite Federation characters. At preregistration, I signed up for an adventure sequel to the episode "A Piece of the Action" and anxiously waited my tour aboard Star Fleet's finest.

At the tournament, the gamemaster passed out the characters, allowing players to state preferences for whom they wished to portray. Before I opened my mouth, Kirk was loudly snatched up by another player whose volume led me to wonder whether we'd even need communicators to contact the ship. His manner of asserting his desire to play the captain gave me a few qualms, but I figured he would get more into the spirit of Kirk's character once the game started. (Here, as on many occasions in the past, I reaffirm that my calling in life was definitely not that of a prophet). As the rest of the *Enterprise* crew was assigned, I found myself with the part of Uhura. Okay, no real problem there. On the few occasions in the series when Uhura actually got to do something, she proved a more than capable figure. Besides, I thought this would give me a chance to do some real role playing; I always enjoy a challenge.

The gamemaster introduced the scenario, and we arrived at our destination. It was time for the Captain to choose the landing party. All the main series characters were represented by players, along with a couple of security men. So our brilliant (like a black hole) captain named the landing party (i.e., playing the adventure). As I listened incredulously, he decreed that all the players, even including Yeoman Rand, plus two NPC security men, would be beaming down, while Scotty and Uhura STAYED ON THE SHIP! In other words, neither the player portraying Scotty, nor I, got to play! Oh, of course, Scotty got to make a few repairs (and got to command the *Enterprise*, for what it was worth), but my entire contribution in the next four hours was repeating, "Mr. Scott, I have the Captain," whenever our fearless leader decided he needed the ship's computers or wanted phaser fire to scare the locals. I might as well have put my piece on cassette and left. Great, huh? I travelled several hundred miles to the con, spent money on the event, only to sit around and be bored for several hours. Forget that I had no chance to win the prize in the game. I didn't even have a good time. Captain Loudmouth did his best to see that nobody else, even among the landing party, got to do much either, as he blustered and bullied his way from encounter to encounter, hardly letting anyone else get a word in edgewise.

Why did this happen? Well, in a way, it was the gamemaster's responsibility for letting the gamehog dominate things the way he did. And I'm reasonably certain the loudmouth didn't set out to see that everyone else missed out on the fun (although there are some determined to win events at any cost). The whole problem is that the loudmouth simply didn't know the first thing about leadership. Specifically, he had no idea how to effectively game the captain of a Federation starship.

Unfortunately, it would appear from complaints I've heard from other quarters that there are a lot of gamers out there who are a bit hazy on exactly how to properly game the captain in ST:RPG. So the problem is not limited to just a few loudmouths out there. Leadership isn't always an easy thing, especially if you haven't had any experience at it in the real world. To bring it into a gaming session in which you suddenly find yourself in command of an entire starship (and yet actually are responsible for a handful of gamers who are there to have a good time) can be a bit bewildering if you've never done it before.

This article is intended to help those of you out there who'd like a crack at gaming the captain (or other Federation leader) by noting a few basic leadership principles as they apply to the position in ST:RPG. Although I'm aiming my remarks at players of ST captain characters, the same principles are applicable to any game system where the players are under military command. If you've had problems playing a starship captain in the past, you might find some of these suggestions will improve your gaming to everyone's benefit.

Be A Leader, Not A Dictator

One of the responsibilities that goes with being a leader is giving orders. However, it is important that they *be* orders, not decrees. A good leader is a servant. He doesn't sit back on his lofty pedestal and tell the underlings when to breathe. He does his job, doing more than those under him, if possible, leading by example. A dictator merely sits back and tells everyone what to do, expecting blind obedience.

As the captain of a Federation starship, it is your duty to give the necessary orders to the personnel under you. And it is their duty to obey these orders. Remember, however, that these are really players, not military personnel under your command. They have simply chosen to take on these roles for this gaming session. The captain can't treat them as he or she would in real life. Dedicated though their characters may be, you can't push them too far. As gamers, they may resent it, and next game session you might find yourself a captain without a crew.

Tone is a lot of it. While, as captain, you don't want to sound indecisive, you don't want to lord your position over the other players either. When you give orders, how are you doing it? Are you loud, as though you're trying to outshout any objections? Is your tone arrogant, hinting your orders better be obeyed or else (how does one keelhaul a person at warp speed)? The best leaders don't need to shout, but can give orders in a tone of quiet assurance.

Above all, don't give your players any reason to resent your orders; for example, belittling them by overstating the obvious, implying that you don't think they're competent, or indicating that you are their fearless leader and they are merely peons. And *never* give an order that you wouldn't be willing to carry out yourself. Finally, don't use the excuse that you *have* to be insufferable because that is the way your character is and you have to role play him as such. If your character was such a martinet, he probably wouldn't have made it to command rank in the first place.

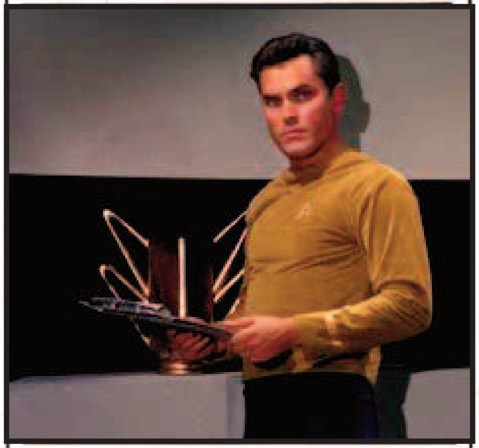
Solicit Advice From Other Players

A good leader can always use advice. It is his decision in the final analysis, but the more input he has, the better the decision he'll be able to make. Just look at all the times Kirk called a meeting of his seniors officer in the TV series. His approach was, "Opinions, gentlemen?" Give the other players a chance. They're intelligent, too; otherwise, they wouldn't be role playing in the first place.

Delegate Authority To Other Players

Okay, you're the captain. That means you're in charge. But you're only one person and can't do it all. A good leader realizes that. You can get the other players to follow you willingly if you simply show confidence in their abilities as players. Of course, this doesn't mean giving the conn to a player the whole game while the adventure is happening planetside. On the other hand, if there are enemy vessels in the area, that player will probably get "a piece of the action" as well.

While, as a gamemaster, I'm not advocating splitting up an adventuring party in a RPG scenario (it often becomes difficult to moderate), such action sometimes becomes necessary in a game. As captain, you are in charge.



But, if you have to split up, you will have to put another officer in charge of the group you're not with. When you do this, it is important that you only give general orders and let him use his own discretion on specifics. Otherwise, you aren't really delegating anything. Let him and his party find the ways to achieve their particular goals.

Know The Other Players And Their Characters' Abilities

Other than at conventions, when you normally are playing with a lot of people you don't know well, you should have a fair idea of what each player can and cannot do well in a gaming situation. This sometimes means matching real personalities with characters with the same traits (unless you are lucky enough to have a few actors in your group who like to try new things, most players take a lot from themselves for their characters). Know the character's stats as well. Who would want to send someone with a STR of 37 to tackle a Gorn? At the start of the adventure, find out what skills and attributes each character has from all the players. If the gamemaster won't allow this for some reason, tell him you are accessing the computer's personnel files. After all, as the captain, it is available to you.

Make Certain Everyone Gets To Play

Absolutely the worse thing any leader can do is relegate some of the other players to a nonplaying status, whether it's only for a part of the game or, heaven forbid, the whole session. As the captain, it is *your* responsibility to make certain all the other players have enough to do. Don't hog the action, or let NPC's do things a player might enjoy doing. There might be some players who don't mind sitting around for hours doing nothing, but I come to a game session to play! And I think others do, too.

There are doubtless countless other smaller, but still significant, things you can do that will help you game the role of the captain more successfully with your own gaming group. The above, however, will give you a good starting ground to ensure that your ST:RPG sessions become even more enjoyable than they already are. If you've already been incorporating these principles in your own play, then congratulations! And please, if you ever sign up for a ST:RPG tournament at a convention and I'm playing, please take the part of the captain before some loudmouth gets it so we all can have a good time!

■

BUZZWORD GENERATOR

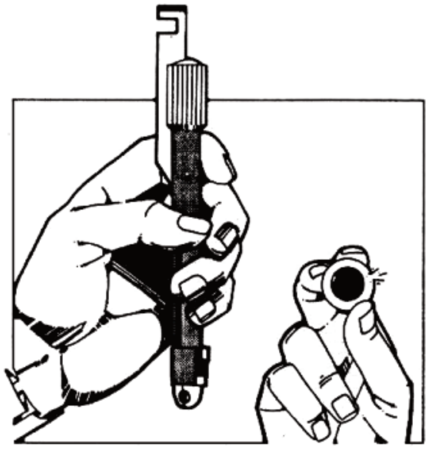
Clarke Johnson

I have always wanted to sound like an erudite alien. I have wanted to chat blithely about advanced scientific items. I wanted Lateral Molecular Synthesizers and Crystallocybernetic technologies to drip from my lips like rain from the roof.

I began to search for a model. Mork from Ork was alien but not convincing. Mr. Spock was erudite but not blithe. Then the Doctor appeared.

I knew he was the one when I heard my first Tangental Warp Ellipse. I strained to hear each Null-phase Delimiter, each Chrono-dimensional Inverter, but I still couldn't do it. I couldn't slip one in or make an alien explanation, or drone incessantly about an unknown science. I needed help. I wanted to talk Doctor Talk.

I needed a Buzzword Generator. Most gamemasters I knew needed one, too. I saw many games go like this:



Before Buzzword Generator

PC1: I stick my head through the hyperdrive hatch. What do I see?
GM: (uncertain) Oh, some wires and modules. Hyperdrive gears.
PC1: Do I recognize anything?
GM: No.
PC2: Come on! He's got two levels of hyperdrive!
GM: (sweating) OK,OK. (rolls) You recognize some stuff.
PC1: Anything I can fix?
GM: Roll under your hyperdrive level.
PC1: (rolls) I made it!
GM: (growling) OK, you fix some stuff and get the ship moving.

What this gamemaster needs is something to produce phrases that are verbally plausible but semantically null. He needs the Buzzword Generator.

To use the BG, you must first establish a pattern. A pattern will tell you how to use the tables of the Generator. For example, in "The Rocky Horror Picture Show," Dr. Scott uses the phrase 'audio-vibratory physio-molecular transport device.' By finding these words on the table we can deduce its pattern to be PREFIX-ADJECTIVE PREFIX-ADJECTIVE DEVICE DEVICE, abbreviated to PRE-ADJ PRE-ADJ DEV DEV.

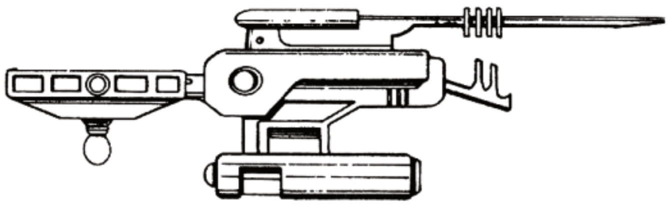
Another example of pattern comes from Doctor Who. The Doctor asks for a Lateral Molecular Synthesizer. Looking into the tables, its pattern is ADJ-ADJ-DEV. Knowing this it is possible to roll dice and create other things he **might** have asked for. Using percentile dice, I get the numbers 20/03/99 and with the pattern find: PARABOLIC HELICAL INTEGRATOR. Now more words with the same pattern.

44/30/86	PLANAR AXIAL ACCELLERATOR
58/81/108	DYNAMIC NEGATIVE STABILIZER
19/13/109	HYPERBOLIC ATOMIC SPLITTER

The pattern is crucial. The numbers mean nothing without the pattern. How can you read from the right list if you don't have a pattern? You may create any pattern you prefer but I don't recommend putting DEVICE and CONDITION in the same phrase. You will only end up throwing a lot of them away. Speaking of throwing things away, if you get a phrase that you don't like, toss it out.

There are many combinations, a lot of them utter drivel. What you want here is quality drivel. I have tested many patterns and find that these produce an acceptable drivel quality level.

PATTERN	EXAMPLE
PRE-ADJ-N-N-DEV	neotoroidal wavelength data stabilizer
ADJ-ADJ-CON	molecular charged wormhole
ADJ-N-DEV(tool)★	directional field welder
PRE-ADJ PRE-ADJ N	paleostellar metagnomonic spin
PRE-ADJ-N-DEV	null-dimensional coil toilet (we want someone for a test flush—someone with the Right Stuff.)



Note: Some words on the tables are enclosed in parentheses. This indicates a subtable is available. You may either use the word in parentheses or roll the dice again and read from the subtable. I am indicating subtable use by making the subtable part of the pattern as in DEV(tool). In addition, I have created a pseudoelement subtable. Who wants to try saying Ytterbium when perfectly good element names like Podium and Armementarium are around? The favorite future element around our house is Tedium 925.

Some Scenarios using the BG:

Dalek: You-will-build-an-APOMOLECULAR-TECTONIC-STRESS-MAGNIFIER-or-we-will-ex-ter-min-ate!

Dr.: I can't. The ANTIPROTONIC LIFT POINT is too unstable. It would create a SPECTRAL SPHERICAL VORTEX.

Dalek: CHARGED ATOMIC DECAY is unimportant. Build! or we will kill your friends.

Dr.: All right. Bring me an ALLONEURAL ACCELLERATION HARMONIZER and a MAGNETOSPECTRAL SHIELD ENERGIZER. And be certain the TANGENTAL PLATE IMPELLER is fully charged.

Not to leave our poor GM of the early example hanging, here he is with new confidence and both buzzword barrels loaded.

PC1: I stick my head through the hyperdrive hatch. What do I see?

GM: (confident) You see the GRAVITATIONAL FLOW NEUTRALIZER, a LINEAR VELOCITY INTEGRATOR, a couple of NUCLEAR GUIDANCE ELEMENTS and a KINETIC IMPULSE TIMER.

PC1: (uncertain) Do I recognize any of this stuff?

GM: No.

PC2: Come on! He's got two levels of hyperdrive!

GM: (cool) I know. It was all theory. He doesn't know a COSMIC DRAG BATTERY from an OPTICAL IMPULSE PIN.

PC1: Do I see anything I can fix?

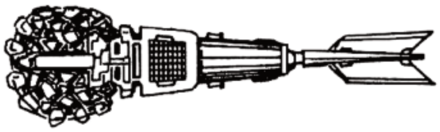
GM: (rubbing it in) Yes. The maintenance light over the hatch is burned out. You could fix that.

PC2: What do the diagnostics say?

GM: The TRANSVERSE FLUX METER indicates a KINETIC RESISTANCE NEGATION. The computer says to go to a spaceport. It takes hyperdrive 14 to fix it.

Of course, the GM need not tell the players that it takes Hyperdrive 14 to **fix** and only hyperdrive 1 to **replace.**

The generator may also be used as a seed generator for ideas. Choose one word or phrase, allow it the chance to exist by asking how it might function, and then build around it. As an example, let's use the APOMOLECULAR TECTONIC STRESS MAGNIFIER cited above. Breaking this down, it becomes a device for intensifying continental plate forces at the molecular level. At its simplest, a volcano maker; at its most complex . . .? What do the Daleks want one for, anyway? What if the Doctor appeared on a planet that hadn't had a quake for three million years and was met by an aftershock? What if the TARDIS materialized at the epicenter of a planetary quake, say, Richter 9? I have already used this seed idea process very successfully, to the chagrin of many.

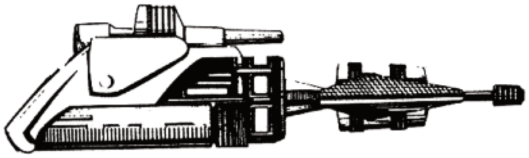


PREFIX LIST
(PRE)

1. Di-
2. Bi-
3. Tri-
4. Tetra-
5. Poly-
6. Multi-
7. Uni-
8. Infra-
9. Para-
10. Ultra-
11. Over-
12. Trans-
13. Hyper-
14. Mono-
15. (other #)
16. Dual
17. Anti-
18. Chrono-
19. Quasi-
20. Geo-
21. Auto-
22. Homo-
23. Homeo-
24. Allo-
25. Pan-
26. Holo-
27. Proto-
28. Stereo-
29. Tele-
30. Exo-
31. Phono-
32. Iso-
33. Macro-
34. Sub-
35. Audio-
36. Physio-
37. Psycho-
38. Meta-
39. Ambi-
40. Helio-
41. Co-
42. Cosmo-
43. Astro-
44. Apo-
45. Peri-
46. Endo-
47. Micro-
48. Uni-
49. Electro-
50. Cryo-
51. Servo-
52. Semi-
53. Omni-
54. Ortho-
55. Radio-
56. Thermo-
57. Dia-
58. Logo-
59. Gyro-
60. Hemi-
61. Demi-
62. Ecto-
63. Meso-
64. Epi-
65. Photo-
66. Inter-
67. Intra-
68. Bio-
69. Spectro-
70. Recto-
71. Parallelo-
72. Rhombo-
73. Trapezo-
74. Puncto-
75. Paleo-
76. Contra-
77. Circum-
78. Magneto-
79. Hypo-
80. Supra-
81. Neo-

ADJECTIVE LIST (ADJ)

1. Polar
2. Lateral
3. Helical
4. Spherical
5. Symmetrical
6. Absorbant
7. Reflective
8. Internal
9. Solar
10. Orbital
11. Cellular
12. Molecular
13. Atomic
14. Nuclear
15. Sonic
16. Dimensional
17. Spacial
18. Temporal
19. Hyperbolic
20. Parabolic
21. Tangential
22. Microscopic
23. Cybernetic
24. Inertial
25. Gravitational
26. Magnetic
27. Stellar
28. Terminal
29. External
30. Axial
31. Trigonometric
32. Equatorial
33. Directional
34. Optical
35. Vibratory
36. Universal
37. Cosmic
38. Conic
39. Thermal
40. Genetic
41. Somatic
42. Mnemonic
43. Gnomonic
44. Planar
45. Linear
46. Circular
47. Stage
48. Crystalline
49. (element name)
50. Sinister/Dexter
51. Plastic
52. Chronic
53. Mechanical
54. Charged
55. Electrical
56. Cryogenic
57. Static
58. Dynamic
59. Tectonic
60. Osmotic
61. Cylindrical
62. Pyramidal
63. Graphic
64. Galactic
65. Hydraulic
66. Porous
67. Toroidal
68. Neural
69. Harmonic
70. Pneumatic
71. Spectral
72. Data
73. Synthetic
74. Peripheral
75. Osmic
76. (particle)-ic
77. Transverse
78. Catalytic
79. Kinetic
80. Virtual
81. Negative
82. Positive
83. Navigation(al)



NOUN LIST (N)

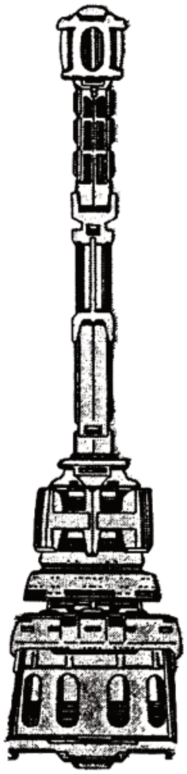
1. Guidance
2. Stress
3. Modulation
4. Field
5. Density
6. Particle
7. Wave
8. Transformation
9. Energy
10. Shield
11. Flux
12. Flow
13. Ion
14. (particle name)
15. Space
16. Time
17. Mass
18. Warp
19. (energy weapon)
20. Fuel
21. Mix
22. Velocity
23. Vector
24. Phase
25. Transfer
26. Storage
27. Translation
28. Coil
29. Helix
30. Spin
31. Charge
32. Form
33. Function
34. Tissue
35. Solid
36. Liquid
37. Gas
38. Plasma
39. Force
40. Discharge
41. Rocket
42. Wavelength
43. Frequency
44. Shift
45. Plate
46. Plane
47. Drag
48. Lift
49. Gravity
50. Radiation
51. Exhaust
52. Circulation
53. Compression
54. Vacuum
55. Pressure
56. Impedance
57. Bias
58. Voltage
59. Digital
60. Convection
61. Conduction
62. Reduction
63. Osmosis
64. Parallax
65. Logic
66. Friction
67. Fluid
68. Shock
69. Amplitude
70. Motion
71. Memory
72. Data
73. Information
74. Impulse
75. Accelleration
76. Signal
77. Impact
78. Resonance
79. Inverse
80. Quantum
81. Stasis
82. Fusion
83. Fission
84. Feedback
85. Shift
86. Compound
87. Extract
88. Dilation
89. Synthesis
90. Fuel
91. Storage
92. Chain

DEVICE LIST (DEV)

1. Linkage
2. Thruster
3. Amplifier
4. Energizer
5. Generator
6. (motor)
7. System
8. Assembly
9. Controller
10. Inducer
11. Drive(r)
12. Reflector
13. (engine)
14. Refractor
15. Detector
16. Receiver
17. Transmitter
18. Transformer
19. Projector
20. Damper
21. Spanner
22. Screwdriver
23. Sampler
24. Timer
25. Sensor
26. Viewer
27. Device
28. (circuit or portion)
29. Transporter
30. Neutralizer
31. Enhancer
32. Equalizer
33. Overdrive
34. Inverter
35. Translator
36. Gear
37. Inhibiter
38. Motivator
39. Transducer
40. Transponder
41. Translocator
42. Limiter
43. Chiller
44. Magnifier
45. Minimizer
46. Oscillator
47. Scope
48. Insulator
49. Welder
50. Joint
51. Compressor
52. Elevator
53. Processor
54. Beam
55. Pump
56. Lens
57. (robot or type)
58. Transport
59. Eliminator
60. Battery
61. Conductor
62. Convector
63. Reducer
64. Meter
65. Antenna
66. Node
67. Lubricant
68. Coolant
69. (gun)
70. Igniter
71. Reactor
72. Atomizer
73. Sterilizer
74. Explosive
75. Valve
76. Bearing
77. Housing
78. Modifier
79. Modulator
80. Ionizer
81. (tool name)
82. Suit
83. Scrambler
84. Decoder
85. Network
86. Accellerator
87. Filter
88. Armor
89. Ray
90. Synchronizer
91. Harmonizer
92. Polarizer
93. Multiplier
94. Vault
95. Mixer
96. Integrator
97. Extractor
98. Element
99. Synthesizer
100. Array
101. Delimiter
102. Toilet
103. Cell
104. Point
105. Stabilizer
106. Splitter

CONDITION LIST (CON)

1. Balance
2. Stability
3. Flow
4. Flux
5. Transmission
6. Continuity
7. Displacement
8. Imbalance
9. Instability
10. Inversion
11. Implosion
12. Discontinuity
13. Storm
14. Doorway
15. Pressure
16. Vortex
17. Warp
18. Precession
19. Drift
20. Maelstrom
21. Gateway
22. Negation
23. Rift
24. Rip
25. Deviation
26. Dissonance
27. Deterioration
28. Decay
29. Distortion
30. Wormhole
31. Hole
32. Tear
33. Inequality
34. Reversion
35. Involution
36. Reduction
37. Disintegration
38. Leakage
39. Fracture
40. Fault
41. Dispersion
42. Diffusion
43. Rupture
44. Separation
45. Evasion
46. Disruption
47. Stasis
48. Excitation
49. Quirk
50. Pulse



ELEMENT SUBTABLE

1. Plasmodium
2. Brachium
3. Clostridium
4. Corium
5. Delirium
6. Lutium
7. Effluvium
8. Endometrium
9. Parametrium
10. Myometrium
11. Ischium
12. Lugubrium
13. Hypanthium
14. Abscinthum
15. Actium
16. Adamantium
17. Aecium
18. Aecidium
19. Venerium
20. Lycopodium
21. Manubrium
22. Allium
23. Allodium
24. Alluvium
25. Nostrum
26. Ostium
27. Precordium
28. Psyllium
29. Sursumcordium
30. Odium
31. Sanatorium
32. Senium
33. Sensorium
34. Postludium
35. Solarium
36. Armamentarium
37. Atrium
38. Euphonium
39. Indusium
40. Panjandrum
41. Arcanum
42. Pandemonium
43. Paramecium
44. Phonibolonium
45. Folium
46. Trifolium
47. Librium
48. Valium
49. Vomitorium
50. Archegonium
51. Sympodium
52. Ommatidium
53. Anthurium
54. Delphinium
55. Podium
56. Monopodium
57. Equilibrium
58. Tympanum
59. Preludium
60. Interludium
61. Oblivium
62. Hysterium
63. Harmonium
64. Opprobrium
65. Pablum
66. Quadrennium
67. Tedium
68. Bdellum
69. Exordium
70. Hypochondrium
71. Eludium
72. Inertrium
73. Ultronium

ROBOT SUBTABLE

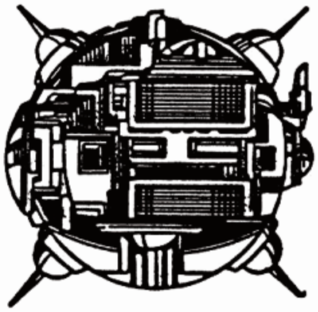
1. robot
2. robotoid
3. android
4. waldo
5. cyberion
6. bot
7. humanoid
8. humot
9. servo
10. mechanical
11. logic
12. mech
13. cyborg
14. drone
15. automaton

PARTICLE SUBTABLE

1. electron
2. betatron
3. graviton
4. hadron
5. hyperon
6. kaon
7. lambdatron
8. meson
9. mesotron
10. muon
11. neutrino
12. omegatron
13. phi-meson
14. photon
15. pion
16. positron
17. proton
18. quark
19. rhon
20. sigmatron
21. strangeon
22. tau-meson
23. xion
24. antielectron
25. antineutrino
26. antineutron
27. antiproton
28. antiparticle
29. hysteron

ENERGY WEAPON SUBTABLE

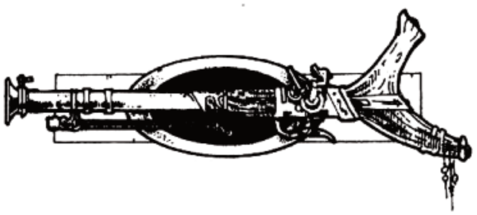
1. laser
2. phaser
3. disruptor
4. blaster
5. disintegrator
6. Delameter
7. fusion gun
8. plasma rifle
9. Darlene rifle
10. stunner
11. implosion gun
12. death ray
13. gauss rifle
14. maser
15. hellbore
16. graser
17. x-laser
18. tonite gun
19. coagulator
20. tasp



Darlene Rifle: Each shell contains a teleportation device. As soon as the shell leaves the muzzle, it teleports to the target, giving full muzzle velocity impact. From **For Texas and Zed** by Zach Hughes.

GUN SUBTABLE

1. barrel
2. slide
3. sear
4. grip
5. magazine
6. sight(s)
7. trigger
8. breech
9. chamber
10. extractor
11. stock
12. cylinder
13. battery
14. bolt
15. butt
16. cock
17. safety
18. carriage
19. muzzle
20. lock
21. receiver
22. hammer
23. pin

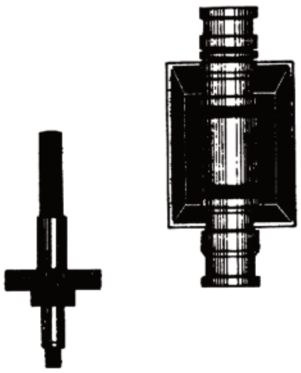


TOOL SUBTABLE

1. screwdriver
2. welder
3. joiner
4. cutter
5. drill
6. saw
7. wrench
8. driver
9. shear
10. lathe
11. reamer
12. mill
13. press
14. pliers
15. spanner
16. plane
17. shaper
18. edger
19. gouge
20. puller
21. ram
22. lance
23. scoop
24. punch
25. borer
26. bar

ENGINE SUBTABLE

1. impeller
2. brake
3. arm
4. line
5. igniter
6. compressor
7. radiator
8. distributor
9. pin
10. sleeve
11. shifter
12. linkage
13. chain
14. belt
15. shaft
16. rod
17. pulley
18. gear
19. pump
20. cam
21. roll(er)
22. bearing
23. housing
24. valve
25. transmission
26. pinion
27. piston
28. spider
29. segment
30. clutch
31. bracket
32. mounting
33. pawl
34. servo
35. spring
36. differential
37. filter
38. timer
39. coil
40. rotor
41. motivator
42. generator
43. cylinder
44. battery



MOTOR SUBTABLE

1. coil
2. rotor
3. resistor
4. motivator
5. generator
6. inductor
7. capacitor
8. display
9. bank
10. array
11. conductor
12. tube
13. transformer
14. meter
15. antenna
16. oscillator
17. switch
18. amplifier
19. detector
20. receiver
21. transmitter
22. sensor
23. viewer
24. neutralizer
25. equalizer
26. inhibitor
27. transducer
28. insulator
29. modulator
30. ionizer
31. scrambler
32. decoder
33. synchronizer
34. multiplier
35. divider
36. mixer
37. element
38. monitor
39. loop
40. filter
41. timer

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On a Quest for the Perfect Names

STARDATE

Donna Dolezai Zelzer

Names! It's hard to come up with good ones. The right names can add the just-right flavor to a character or a campaign, while the wrong ones can leave a false impression. Let's face it, your mental picture of a planet called Hooter's Last Stop just isn't the same as your vision of one named Can-Thiet or Gemynd.

So how *do* you discover the perfect names?

One method is to use foreign words. Go to the foreign language section of your local library and browse through the dictionaries until you find a language or languages that fit your worlds and their people. You might decide to use German or Old English on a planet with a medieval level of technology, French or Italian for a highly aristocratic society, Hawaiian for a campaign on a watery world, Hopi or Navaho for one on a semi-arid planet.

If your adventure includes people from several very different cultures, use widely different languages. For example, the people on a low-tech planet could have names derived from Old English, while a space trader from an ice planet has an Icelandic-based namme, and a diplomat from a jungle world has a name developed from Vietnamese.

Once you've chosen your languages, it's time to start developing names.

The simplest way is the one-word translation. Is the owner of a space port bar a large gruff woman, givn to quarreling with customers? She could be Kampa (fight in Swedish), while her handsome son is named Hermoso or Sheyn (handsome in Spanish and Yiddish). A thief could be Ladron or Ganev (thief in Spanish and Yiddish), a deep river, the Tief (deep in German), and an orbital city, Etoile (star in French) or Raum (space in German).

Be creative when you choose the words to use. Is that thief slippery like a snake? Call him Orm (snake in Swedish). Does the good-looking son yearn to leave his home planet? Name him resande (traveler in Swedish).

If single words don't work, try combining words or using phrases. A deep and narrow river could be the Schmoltif (schmol is narrow and tif is deep in Tiddish), while an animal that looks like an elephant but jumpts like a rabbit is a sautnoz (saut is jump in French, noz is nose in Yiddish).

Don't be afraid to use long phrases. A person who speaks many languages could be Talamoltisprak (tala is speak in Swedish, molti is many in Italian, sprak is language in Swedish). That's a bit long, so you could break it up into given and family names.: Tala Moltisprak or Tal Amol Tisprak. Or just shorten it by using only part of each word: Tamoti, Tisolta, Molalis.

This system of using only part of several separate words leads us to the second method of generating names: Take familiar English words and combine them in various ways. You can use the first part of both names, the last part of both, the first of one and the last of the other, or any irregular combination. For example, Cindy + Mike yields names like Cinmi, Mikei, Dyike, Kendy, Cinke, Midy, Inake, and Ikcin.

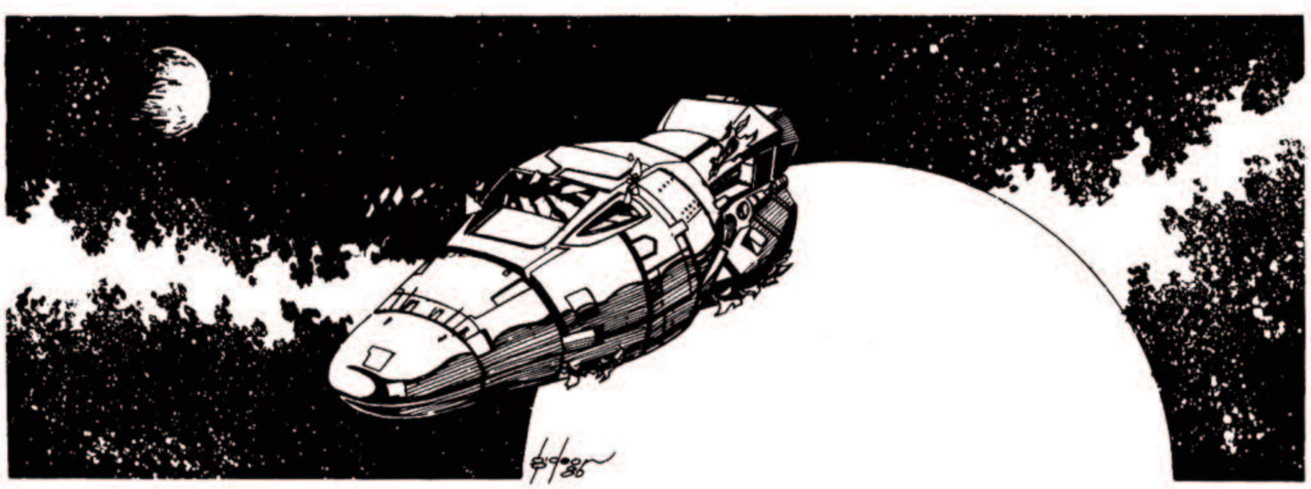
Try combining several names, or the words of a descriptive phrase. That jumping animal with the long nose could be a nojum, a nomp, a junos, or an umpse. The speaker of many languages could be Spemala, Anguake, or Guakeran.

This method is especially nice because not only can you do it without dictionaries, but you can generate a lot of names very quickly, then decide who or what they should be used for.

Another method with these same two advantages is the letter-substitution method. Take a familiar word or name, then change some or all of the letters. I generally exchange letters *within* these groups: c,s,z c,k,g g,gh,j b,p t,th,d m,n f,ph,p a,ah y,i,e u,oo w,v. When you use this method cat became kaht, gaht, kath, or gath, while Cindy turns into Zyndi, Zynthi, Kyndi, Kindy, or Kinthi, to list just a few of the possible transformations.

You can also use this substitution method to change the names you've developed using the other methods. Recently I needed a name for a female musician. Galen means sing in Old English, but that sounds masculine to me, so I changed g into j and e into i to get Jalin, and that's the name I used.

So, don't be satisfied with names that are dull, boring, or just plain *wrong*. Take a little extra time, and you'll be rewarded with names that bring your characters or your campaign to life!



As an adventure might help the newly initiated player and GM to the FASA system, presented here is one of three scenarios published with the 1st Edition Boxset and only ever once again with the 2nd Edition Limited Deluxe Boxset... *NOT* the Normal 2nd Edition Boxset or the Deluxe Boxset, but the Deluxe Limited Ca$hgrab.

Ghosts of Conscience

WARNING: The material in this adventure scenario description is intended for use by gamemasters. In the interest of fairness and maximum enjoyment, do not read this material unless you intend to act as gamemaster for this adventure!

THE ADVENTURING GROUP

This adventure should be undertaken by the crew of a Constitution-class starship (either the U.S.S. Enterprise or one of her sister ships). Since most of the action takes place on board another ship of this class, use of the deck plans for the Constitution class is required. These plans, in miniature form, are part of the boxed set of **STAR TREK: The Role-Playing Game.** They are also available, sized for counters and 15mm miniature figures, separately from FASA. Use of the larger, more detailed plan set is helpful for combat situations.

NOTE: The ship involved in this scenario can be any Constitution class vessel. Where the text refers to the Enterprise, substitute the ship you are using. Certain aspects of this adventure will have special meaning for the Enterprise crew, however. If your campaign has established the U.S.S. Hood as your base of operations, feel free to change the trapped ship's name as well.

BACKGROUND

The captain of the U.S.S. Enterprise receives a set of sealed orders at Starbase 11. He is instructed to take his ship and proceed "with all possible haste" to a set of coordinates. Upon arriving, the sealed orders are to be opened and followed to the letter. The coordinates given do not correspond to any known star system, and are deep in unknown space. Actually, the coordinates do not refer to a single point, but to a course that the Enterprise must match at a certain place and time, leading the captain to believe that they are being sent to intercept some sort of moving object.

The Enterprise must proceed at Warp 6 for 5 days to reach the coordinates provided at the correct time.

DEEP IN UNKNOWN SPACE

As the coordinates in question are approached, long-range sensors indicate the presence of a highly unusual gravitational anomaly. If the captain is a non-player character, he will open his sealed orders at this point, but leave it up to the captain what to do, if he/she is a player character. If the orders are opened, give the information in that section to the captain. If not, the helmsman must attempt a saving roll on the Starship Helm Operation skill. If the roll succeeds, the ship is barely brought into the proper course, despite a rapidly shifting set of gravitational stresses and a strange rotating magnetic field. If the roll fails, the coordinates are missed by a fraction because of the unexpected gravity shifts, and the ship takes damage from the unknown forces. (If the sealed orders were opened immediately, the captain is warned about what she/he is facing, and the helmsman needs make no saving roll).

If the ship takes damage as above, locate damage in a manner similar to ship combat. Roll 1D10 on the following table:

1 = Forward
2 = Starboard/forward
3 = Starboard/aft
4 = Aft
5 = Port aft
6 = Port/forward
7-10 = Roll Again

The ship takes damage, as if it had been hit for 1 point of damage on this side with shields DOWN. (Whether shields were really up or down is unimportant, as they do not protect against gravity stresses).

Make one damage roll as above for every 10 points (or fraction thereof) the Helm saving roll was missed by. Thus, if the helmsman has a Helm skill level of 45, and rolls a 72, make three damage rolls. Once the damage rolls are made, the helmsman is able to bring the ship around precisely where it should be, slipping into course and speed as provided by Star Fleet.

The crew will find that they are now trailing a true astronomical wonder. A pair of neutron stars — dense spheres of neutronium — orbit each other in a whirligig dance. As they rotate, they are moving rapidly throughout this previously unexplored section of the galaxy. Indeed, their projected course will not take them any closer to the Federation, nor anywhere near any other major spacefaring civilization.

The whirling neutron stars are responsible for the wild gravitational fluctuations. Now that the phenomenon is known, the helmsman can easily correct for the changes, especially at this distance. Harder to handle are the shifting lines of force of the stars' magnetic fields, which will jam all subspace radio transmissions and make sensor readings difficult. Despite this, long range sensors get a fuzzy reading indicating a ship may be trapped in the center of the spinning system itself. At this point, if the sealed orders have not yet been opened, they should be examined by the captain. The text of these orders is noted below.

STARDATE 7662.4
UNITED FEDERATION OF PLANETS
STAR FLEET INTELLIGENCE CORPS

TOP SECRET

TO THE CAPTAIN OF THE U.S.S. Enterprise:

On Stardate 7636.2, the starship U.S.S. Hood was ordered to your present coordinates on a top secret mission to investigate the astronomical phenomenon of two rotating neutron stars, first reported by a Federation scout in this area. Using instruments provided to them by Star Fleet Intelligence, plus their own ship's sensors, they were instructed to obtain information about the magneto-gravitic structure of the system, and how it affected the fabric of space in this area.

It is believed by a number of Federation scientists that such a series of magnetic/gravitic effects can create – under the proper conditions – a time/space interphase, such as that experienced by the starship U.S.S. Enterprise near Tholian space on Stardate 5693.4. DESIGNER'S NOTE: See the episode *The Tholian Web.* A greater understanding of this effect is considered to be of vital importance.

At some time during their observations, the Hood became caught in the gravitational field of the system and was drawn in. Before they were trapped, they managed to launch a message buoy. The buoy transmitted the news of their plight by subspace radio once it was out of the system's magnetic field. Security restrictions made it impossible for them to send back their gathered data in this manner, however.

The crew of the Enterprise is instructed to move the ship close enough to the rotating stars to locate the Hood. If possible, they are to beam aboard a party of volunteers to recover coded records from the Engineering, Medical, Life Sciences, Physics and Chemistry departments, plus important summaries to be found in the possession of the ship's captain. Computer codewords for retrieval of this Top Secret data are provided with these orders.

According to the data provided with the Hood's message, the ship was likely to be drawn into an interphase area believed to exist at the center of formations like the one they were observing. The Hood was provided with drugs devised to combat the madness-inducing effects of close proximity to an interphase area, but the Hood reported that such drugs were proving to be less effective as duration close to the phenomenon increased. Thus, though survivors on board the Hood are unlikely to exist, such survivors are to be considered dangerous and are considered expendable.

Individual crew members of the U.S.S. Enterprise are also considered expendable, but the information MUST be retrieved and returned to the Intelligence Corps officer at Starbase 11. Thus, the survival of the Enterprise is of primary importance, as it is the only capital ship capable of such a mission presently in the quadrant and near enough to help.

Once the information is retrieved, the Hood is to be destroyed by the Enterprise, for security reasons.

Again, drugs for combating the detrimental effects of interphase have been provided in sealed containers in the Enterprise's cargo helds. These drugs should be administered to all personnel aboard, with heavier doses given to the volunteer party aboard the Hood. We warn again that the drugs begin to lose effectiveness after a time, so haste in accomplishing the mission is advised.

Retrieval of the necessary data is considered the top priority by this office. Details of the mission are to be provided to the crew only on a "need to know" basis, at the discretion of the captain. The retrieval party is to be all volunteers, but it is recommended that at least one medical officer, one astrophysics specialist (perhaps the science officer), and one engineering officer be present. In addition, security regulations require the presence of at least one security officer above the rank of Lieutenant J. G.

(signed) Admiral J. L. Kilgore
Star Fleet Intelligence Corps
Starbase 11

FILE INFORMATION

The captain and members of the landing party will certainly wish to consult the files regarding the Enterprise's earlier experiences with an interphase phenomenon. (The episode *The Tholian Web* presents this mission's results). The following notes can be called up from the computer files, for use in briefing the characters (particularly if they are NOT Enterprise crewmen already familiar with the situation). Players who are not familiar with the episode in question will especially need to see this information.

INTERPHASE: This phenomenon has been described as a "flaw" in the fabric of space-time. It is a pocket outside of known reality – perhaps a doorway to alternate universes. Such an area has only been closely observed once, in an area on the fringes of Tholian space, by the crew of the U.S.S. Enterprise. At that time, the interphase area was in deep space, apparently a natural phenomenon. It is believed by Star Fleet astrophysicists, however, that such an area could be created artificially by rapidly shifting gravitic and magnetic fields of great strength.

When in the close proximity of an interphase area, the synapses of the brain seem to be subtly affected. Sensory distortion results after a time, leading eventually to madness, with the victim most often becoming violent – even homicidal. Drugs have been developed that inhibit this effect, but these drugs lose their effectiveness after a time.

Within the actual interphase area itself, an object is caught between universes. Any use of large amounts of power (including the use of beamed weaponry and warp drives) disturbs the interphase area, and may cause objects to shift back and forth randomly between universes. Such objects may appear and disappear at random, or appear only as ghostly images.

APPROACHING THE HOOD

As expected, the ship trapped at the center of the interphase area is indeed the Hood. Sensor readings taken at the time of the Enterprise's arrival indicate that it shifted momentarily into the "other" universe beyond the interphase momentarily at that moment. (This was probably due to the effect of the Enterprise's warp engines). If not further disturbed by warp power or weapons fire, the computer projections indicate that the Hood will remain stable for 5 hours before shifting again. This gives the Enterprise party a "window" in which to operate.

To beam over a party, the Enterprise must approach closer on impulse power only. At the moment of closest approach, there will be one chance to transport. (Therefore, the party can be no larger than seven people – no more can be transported by one location at once safely by the more reliable standard transporter). The Enterprise then withdraws outside of transporter range for three hours. At the end of this time, it will make a second close pass, beaming aboard the party. Communicators will not penetrate the magnetic interference to contact the ship (though they should work for communication among landing party members on the Hood), so the characters must be gathered at one predetermined location (the bridge is suggested) for beam up at the end of three hours.

If the rendezvous is missed by one or more, the Enterprise will have time for one more pass one hour later, beaming up any stragglers who have reached to drop into the other universe, never to return. By that time, the Enterprise should have retrieved the landing party and set course for home.

Each approach attempt is tricky, requiring split-second timing and great skill at the helm. Gravitational gradients shift quickly, and sensors are of limited help in compensating for these gravitational shifts, due to magnetic sensor interference. For each approach, require a saving roll as before on the helmsman's Starship Helm Operation skill. Failure means the helmsman has misjudged the approach slightly. Damage is taken from gravitational stress. Roll once for damage as before, as if struck by a weapon for one point of damage with shields down. If the damage result calls for bridge personnel to be shaken about, consider that the transporter room people were shaken as well. No attempt to transport can be made in this case, and it will take 30 minutes to reposition for another try.

THE RETRIEVAL PARTY

Sensor readings are fuzzy, but they indicate that the Hood is basically structurally sound and has an atmosphere. There is no power being produced by the warp engines, but it is possible that impulse power will still be running lights and routine services. Considering that the Hood has been here at least 8 days, it is unlikely that any survivors will be encountered. To be on the safe side, however, the captain (or whoever commands the party) will certainly wish to issue phasers – perhaps Phaser II.

The information to be retrieved will be in the ship's computer, but each part can only be accessed at one certain location, with a special set of codewords provided with the sealed orders. These locations are:

Special Studies Lab - Deck 3 - Primary Hull
Primary Hull Engineering Section - Deck 6 - Primary Hull
Main Medical Lab - Deck 7 - Primary Hull
Main Engineering Section - Deck 16 - Secondary Hull
Botany Section - Deck 18 -Secondary Hull

Before the retrieval codewords will work, however, a special override program must be initiated from the bridge computer station. Thus, it is probably easiest if the retrieval team is beamed to that location. This, of course, is entirely up to the team's commander or the captain.

In addition, the team is to retrieve the summaries and personal notes made by the Hood's captain. Security procedures would call for this information to be stored separately from the computer, on a memory ship which would most likely be kept in the safe in the captain's cabin on deck 5 of the primary hull.

THE WRECK OF THE U.S.S. HOOD

When the retrieval party materializes, they will find the Hood a darkened, empty derelict. Only the emergency lighting systems are operating, making the rooms and corridors gloomy chambers. Most rooms are a shambles of broken instruments and corpses can be found in the corridors. Almost all have died violently. Crewmen and women will be found murdered — by each other.

It should become apparent to the party after visiting a few areas that there are quite a few less bodies than there should be! Don't up and tell them this — let them infer it from your descriptions. For instance, if they beam in on the bridge, point out off-handedly that only a few bodies are there. Corridors will have a body or two here and there, but most staterooms and small areas will be empty. If someone in the party gets suspicious and starts paying attention to the number of bodies, you may then confirm that the ship does seem to be somewhat emptier than it should.

When the players start to move about the ship, they will soon learn what happened to the crewmen who are missing. Each time a new major area is entered (like a lab, engineering section, bridge, etc.), or every 5 minutes of real time, roll 1D10, and consult the following table for results.

1-5 Nothing happens

6-7 A member of the party (determine randomly) glimpses movement out of the corner of his/her eye. Investigation reveals nothing. After a few such incidents, characters will begin to make out momentary flickers of ghostly images of people.

8 A ghostly image appears in full view, lasting for several seconds before vanishing. Each image should be of a different person or group of people. The people are wearing Star Fleet uniforms and seem to be in distress or torment. Groups may be fighting among themselves. Use your imagination and give vivid descriptions. Some of the "ghosts" may see and react to the party (violently), but they can neither be touched nor heard - only seen.

9-10 Another ghostly image (or images) appears. (Roll 1D10-5 for the number of figures, with a minimum of one). They can see and react to the party.[1] They will flicker momentarily, then suddenly become solid! The party will be immediately attacked by the insane crewpersons! (See notes on combat situations below . . .)

The best approach is NOT to roll the first few such encounters, giving the characters a chance to build some caution (and get very, very nervous!) Let them notice a couple of movements (as in 6-7 above) first, then actually see a figure clearly (as in 8 above) before starting to roll randomly. If the gamemaster desires, he/she can simply make up ALL the encounters as they become dramatically desirable. There is nothing inherently unfair about this approach to these encounters IF AND ONLY IF the gamemaster realizes that her/his aim is NOT to kill off players, but to give them a challenging, exciting game! If you have any doubts about your motives, use the random table.

The special locations where information must be retrieved from computer terminals are noted below, along with little problems they may encounter in certain areas. Feel free to leave out some of these hazards, if you think they will prove too difficult for your party. If things are going too smoothly, devise additional hazards to restore game balance.

SPECIAL LOCATIONS — U.S.S. HOOD

TURBOELEVATORS: These aren't working anywhere on the ship. There's nothing wrong with the systems, but one insane crewman accidentally threw the main switch-off in the elevator repair room on deck 6. (The party won't know that, of course, though a cursory examination of the circuitry by someone with the general engineering skill will reveal that the elevators have been turned off, probably in the maintenance ship). The players could go there and turn them back on, and the gamemaster should allow this if they want to do so. It would probably be just as fast, however, to simply use the gangways and stairs. (See notes on moving about the ship presented just after this section).

BRIDGE: As stated earlier, there are only a few crewmen here. It looks like those whose bodies remain had a great battle. Consoles have been smashed with heavy objects and bodies are sprawled awkwardly. The computer console at the science officer's station is broken, thanks to a swung chair. If inspected by someone with 10 or above skill level in Computer Technology, it will be found to be repairable. One attempt at a saving roll on that skill may be made each 10 minutes of the game time. Success means the computer is repaired enough to give the codewords that free the other stations to release data when requested.

SPECIAL STUDIES LAB (D3 PRIMARY): This is the lab where most of the research was coordinated. There are two dead crewmen here who apparently killed each other. The computer terminal is intact, though. When the information is requested and codewords given, it will be transferred to a memory chip, which will then pop out of a slot. At the same time, the information will be scanned on a small viewscreen. (This will be true at each location where information is requested).

If the players wish to look at the information readout on the screen, it will zip by too fast for detailed reading. They will get the general drift of it, though, and discover the real purpose of the Star Fleet Intelligence Corps' interest in the interphase phenomenon. The intelligence corps intends to use the information in attempts to create an interphase condition under controlled conditions, with an eye toward making a weapon out of it.

An "interphase gun" would be a powerful weapon, indeed, capable of making an entire ship – perhaps a whole fleet – vanish out of space/time altogether! The reasons for tight security are immediately obvious.

CAPTAIN'S CABIN (D5 PRIMARY): The door into this area will not open normally and must be cut through with phasers. (This will take about 10 minutes, and will drain one phaser entirely – these doors are reinforced! Of course, there are plenty of phasers around on the bodies of security men and in the armory. It is possible the players will not think of this, and the gamemaster should not point it out if they forget!) Once inside, they will find that the door mechanism has been deliberately jammed from the inside. The body of the ship's commanding officer, Captain Hugo Revere, is slumped in a chair at the computer console, his hand resting on a memory chip near the readout slot.

If the tape is played, it proves to be Capt. Revere's final log entry. He is responsible for the ship still having impulse power for lights and routine systems. He explains how he jammed the door when the rioting got out of hand to protect the main power busses, having observed that the maddened crewmen did not have enough sense remaining to make an organized effort with phaser to cut through the door. He know someone would be sent to retrieve the data, and saw to it that the ship's power would still be on when they arrived. He further explained that he has taken poison from the sick bay stores, to insure he will not go mad and undo the protective measures he has set up. Revere also reveals the combination to his safe in his cabin, which contains the all-important summaries and other notes on a data chip.

Capt. Revere's last words are especially revealing;

"I have performed my duty, as you who listen to this must perform your own. This duty has cost the lives of over four hundred fine men and women – my comrades and friends. I pray that, if this terrible new device is ever constructed, it will be controlled by far wiser men than those who sent us on this god forsaken mission in the first place. Let their ghosts be your conscience. The best of luck to you, whomever you are. Carry out your orders. Revere out."

The information can be retrieved from the computer with no difficulty, dispensed as a data chip. If scanned, this data reveals a lot of technical information, but nothing particularly interesting.

MAIN MEDICAL LAB (D7 PRIMARY): This is a particularly gruesome area. Throughout sick bay, doctors and nurses have turned surgical instruments on each other or on themselves. The information in the computer is intact and can be retrieved as a data chip and scanned. In his report, the medical officer notes that he is doubtful current ships could carry adequate shielding against the effects of the interphase to make its use as a weapon practical. A personal note appended to the information soundly denounces the whole idea as "stupid and totally without merit", and "contrary to everything Star Fleet stands for".

MAIN ENGINEERING SECTION (D16 SECONDARY): This place is a total ruin, with warp power completely shut down and consoles smashed beyond repair. Miraculously, the computer console itself still works, albeit a bit sluggishly. A saving roll on the computer operation skill must be made successfully to get the information transferred to a chip. (If the first attempt fails, an attempt may be made every 10 minutes until success is gained).

If the information is scanned, it will reveal the chief engineer's observation that the power required for such a weapon is far beyond what any ship currently existing can produce, approaching that generated by a major industrial world.

BOTANY SECTION (D18 SECONDARY) This is more of a garden than a lab, but there is a small terminal where the information can be obtained. Nothing particularly useful will be learned by scanning the data as it is loaded onto a data chip.

MOVING ABOUT ON THE U.S.S. HOOD

Since the Hood is virtually identical to the ship your player characters serve aboard, there should be no secret about where things are and how to get there. With the turboelevators out, it will take time to get around, but that is all.

The simplest method of playing out the scenario is to lay the deck plans for the Constitution-class cruiser out in front of the players and let them show you where they want to go. The CHARACTERS know quite well where any major section of this ship is located, even if the PLAYERS are new and not familiar with the plans. Help them out when they ask directions to a particular place common to all ships of this type. For specific data about things unique to this ship, they may want to consult any computer terminal for information, but don't help them unless they do.

Have them show you the route they will take to go from place to place, but don't make them move it out in combat turns until you determine something unusual (like a combat encounter with crazed crewmen) is about to occur. Let them examine the maps as much as they want – this is a familiar type of ship, and not a labyrinth.

COMBAT ENCOUNTERS

When ghostly figures start showing up, the players should start to worry. Even so, the first time one becomes solid and attacks, they may be surprised. Crazed crewmen will not use phasers and such, or exhibit any coherent strategy or cooperation. Still, they will fight in a "berserk" fashion, ignoring normal rolls for unconsciousness until the unconsciousness threshold is passed.

For simplicity's sake, don't try to roll up statistics for each crewman or crewwoman that pops up. Instead, use the following statistics, which have been modified to allow for berserk rage and lack of intelligent strategy.

STR 70 END 50 INT 20 DEX 50 CHA 30 LUC 40 PSI 0
PERSONAL COMBAT (unarmed): 20

Some crewmen will pick up heavy objects, others will just go into hand-to-hand combat. Note that they are likely to attack each other as well as the party, although the more unfamiliar party will be the main target.

Though the Hood is primarily crewed by humans, throw in an occasional non-human crewperson, modifying the statistics above using the racial modifiers noted in the section of the rules on creating characters.

Each time phasers are used on board (against crewmen, or as a cutting torch) roll 1D10. On a roll of 1 or 2, the ship lurches and flickers in and out of existence momentarily, indicating that the use of phasers is disturbing the interphase. No other effect is created by the use of phasers, but the FEAR of disturbing the interphase will probably cause players to limit their use of phasers, evening the odds somewhat against crazed crewmen.

Also remember that crewmen can phase OUT of this universe as easily as IN! For each turn of combat, roll 1D10 for each insane crewman. On a roll of 1, that crewman flickers and fades away! (The truly vicious gamemaster could require players to make a LUC save each time they disturb the interphase with phaser fire. Failure would cause that crewman to flicker in and out of the "other" universe beyond the tear in space-time. A second LUC save attempt would have to be made immediately. If that one succeeded, the player remained in this universe. If it failed, the player was lost into the other universe. This is not recommended by the designers, though it is a realistic possibility, as we dislike killing off player characters through no fault of their own. Use your own judgement, based on how loud your players are likely to howl if an important character is lost.

ENDGAME

Once the information is gathered from terminals all over the ship, the characters should meet in the predesignated area for beam up on schedule. While they are waiting for pickup, throw one last encounter at them.

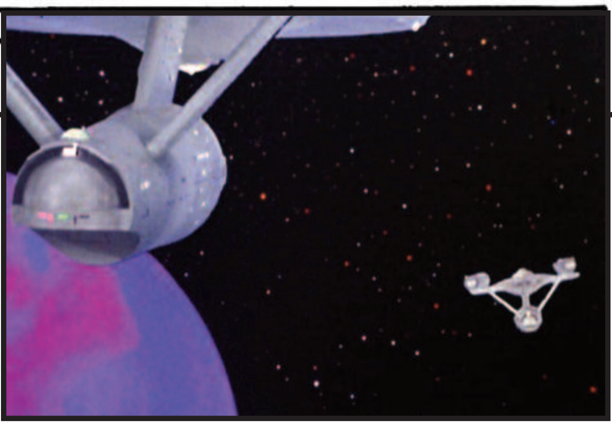
The ship flickers briefly, and suddenly a number of crewmen blink out of nowhere. (Choose the number of attackers for play balance. There should probably be about the same number as there are members of the retrieval party). These crewmen attack, very near to the time for pickup.

Let the battle continue for a few turns, then beam the characters aboard. Any insane crewmen at the retrieval site will also be beamed aboard. These people are still insane, but no longer subject to being drawn away into the other universe. They must now be restrained (giving you one last battle in the Enterprise transporter room!), but they can probably be cured.

The beaming back of the insane crewmen may lead characters to think about ways of rescuing others. It might be suggested by a non-player transporter technician that another pass be made (if there is time), with a multi-person emergency transporter used on wide-band acceptance to beam aboard any living beings it can grab. The procedure is dangerous, but the crewmen aboard the doomed ship have nothing to lose.

If the procedure is attempted, the Enterprise must take the same risks outlined in the section of the scenario dealing with the beam-down pass. At the critical moment, one 22-man transporter is activated. Roll 2D10+2 to determine the number of life patterns picked up by the transporter, then attempt a saving roll on the transporter operator's Transporter Operations skill level for each pattern. Each roll that fails means that crewman was lost in transit, but each success brings one crewman aboard. (I hope someone in the party thought to provide security personnel to restrain so many insane crewmen).

The use of so much transporter power so near the interphase area will affect the interphase, however. The Hood will flicker in and out of this reality several times, then vanish forever. Still, some may be saved. Star Fleet expected no survivors, but perhaps the Enterprise can beat the odds once more, bringing back the information, and a few crewmen — ghosts to haunt the conscience of the Star Fleet bureaucracy.



DESIGNER'S NOTES:

First, a quick note about interphase, environment suits, and *The Tholian Web*. In that episode, Kirk survives being shuttled back and forth in space-time only because he is wearing an environment suit. Presumably, in the "other" dimension Kirk is trapped in for a time, there is nothing but vacuum. McCoy has to give him Tri-Ox to revive him when he is finally beamed aboard.

So why are my ghostly crewmen still alive? The honest answer is "because it makes the game more interesting that way". Frankly, anything else detracted from the atmosphere (excuse the pun) of the scenario. It was a purely pragmatic decision on my part as a designer. If this minor point spoils your enjoyment of the game, I apologize. Feel free to rework in any logical way you wish.

I can think of several ways the crewmen could have survived. Perhaps the other side of this particular interphase area intersects a planet with atmosphere. It is also possible that the crewmen do not actually fade entirely into the other universe, but are held "in transit" (such as is possible with the transporter), not needing to breathe. (This would make it similar to the "corridor" in which Lazarus traps himself and his double in the episode *The Alternative Factor* . . . There! That provides me with a precedent from STAR TREK lore after all!) It is also quite possible that physical laws do not work the same on the other side of this "tear in space-time".

If it bugs the players, explain it in one of these ways, or make something up on your own. I really felt, in this case, that the story was more important than the scientific point. So sue me — STAR TREK did the same thing any number of times.

* * * * *

This scenario grew out of my desire to express my feeling that any bureaucracy, no matter how benevolent, can be led into colossal blunders if they allow people to be subordinated to the pursuit of singleminded goals. No doubt in the enlightened world of STAR TREK's future such tragedies will be few and far between, but they will occur. When they do, it will take the bravery, resourcefulness, and compassion of the individual commander and crewman to salvage whatever she or he can from the waste of bureaucratic foolishness.

Perhaps this theme is too weighty for an adventure game, but Ghosts of Conscience is also a good adventure without consideration of its moral. The television series STAR TREK was not content to merely entertain. Gene Roddenberry and company attempted to reflect how the concerns of today's men and women would affect the people of STAR TREK's tomorrow. Therefore, we occasionally incorporate these concerns into the game, to remain true to STAR TREK's ideals.

Players are likely to get pretty upset with Star Fleet over this whole thing, particularly since the evidence they are gathering (if they bother to watch when it displays) indicates that the interphase effect will not make a practical weapon in any case. (Honestly, anyone with a little sense could have told them that. This whole thing must have been planned by a very short-sighted bureaucrat. Such things DO happen, however, even in the finest organizations).

If Kirk is involved, he would most likely do his duty and turn in the information — but he would raise an incredible fuss, perhaps jeopardizing his career in the process. With his clout due to his phenomenal record, he would be likely, in the end, to win out, and probably could at least get the idiot bureaucrats who planned the mission demoted to apprentice deck-scrubbers.

Spock, who abhors any unnecessary endangering of life, would be even more profoundly affected, but he would approach things from a logical Vulcan standpoint. It would not be out of character for him to take matters into his own hands and find an eminently logical way to have the evidence accidentally destroyed before it could be turned over to the Fleet.

Let your players work out what they want to do on their own, but this designer won't be disappointed if they find a way to thwart Star Fleet's intentions without violating their sense of duty or getting caught violating orders. (They'd best be very careful if they want to avoid a court-martial. But if they decide to risk it, give them a reasonable chance to get away with it).

If your players take this adventure personally, and react with indignation and caring to the loss of the U.S.S. Hood, this designer will feel he has succeeded — at least a bit — in an attempt to be true to the ideals that make STAR TREK a legend.

Guy W. McLimore, Jr.

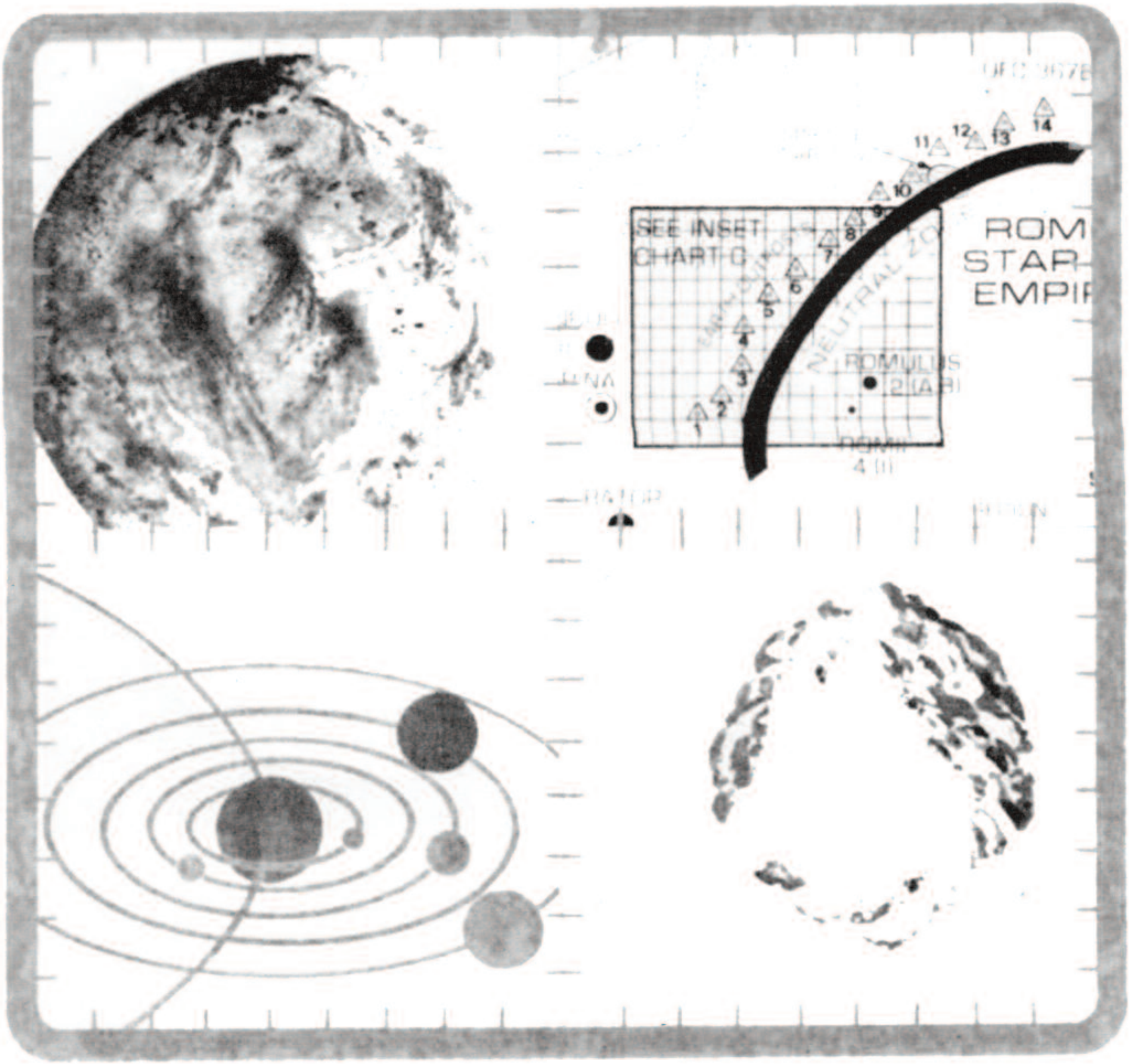
TECHNICAL MANUAL | TM: 300149-03

Star Trek Maps

INTRODUCTION TO NAVIGATION

STAR FLEET COMMAND

TECHNICAL PUBLICATIONS SECTION



DEDICATION

The navigation maps and this manual were both a labor of love and an agonizing effort for all involved. The project represents over a year and a half of work above and beyond the call of duty. Through it all, Bantam Books gave us unlimited cooperation. A very special thanks to Bantam Editor Sydny Weinberg, whose support during rough seas (the untimely death of Mike McMaster) never faltered. Special thanks also to the staff at Bantam, who had the foresight to make this project a reality. To all who worked directly on this project, especially Barbara White, Lee Cole, Geoffrey Mandel, Michael Nicastre, and John Upton, my deepest gratitude. To Gene Roddenberry and the cast and crew of Star Trek, thank you for your inspiration and vision.

Jeff Maynard

> *"All I ask is a tall ship and a star to steer her by . . ."*
>
> JOHN MASEFIELD
> *Sea Fever*, 1902

PREFACE

Although originally written as a Star Fleet Academy text, this manual has been substantially revised and updated to serve as an introduction to the basic principles of navigation in space. Some background in navigation or mathematics is necessary, and will enable the interested reader to make use of some of the more advanced navigational techniques that are covered.

The authors of this text have tried to keep the language as concise as possible, and on a level that will be readily understood by a broad cross-section of readers; however, as some of the concepts involved are inherently more difficult than others, we have, where possible, referred to works that will provide a more thorough introduction to these concepts.

After reading this manual, the reader will understand the basic principles involved in interstellar travel, including the use of star charts, navigation and course calculations, and regulations governing the operation of spacecraft. Of course, much more material must be covered before one can become a navigator; but by understanding the concepts presented in this manual you will have taken the first, and most important, step.

A set of four-color star charts have been provided with this manual. Views of the explored galaxy and major star systems are keyed to the navigation information in the following sections. It is recommended that the reader refer to these charts whenever necessary to understand the concepts described below.

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1.0 INTRODUCTION

This manual is an introductory text designed to give the reader a thorough understanding of the basic principles and techniques of navigation in space. Alone, it will not qualify one as a navigator. There remains a large amount of additional material, covering more sophisticated techniques beyond the scope of this introductory work, that must also be understood.

1.1 HISTORICAL BACKGROUND

The navigation system in use today is the sometimes intentional, sometimes haphazard result of the diverse systems developed by spacefaring civilizations in our galaxy. Current navigational techniques are, for the most part, the result of the natural progression from systems advanced as early as the twentieth century to guide primitive air- and spacecraft from Earth. They have been adopted by many of the other races in the Federation. It is of interest to note that divers navigational systems are still in use within the Federation: for instance, the Vulcan technique of utilizing local polarity of galactic magnetic fields is common in many regions; and the Medusans have developed their own, non-Cartesian methods. This manual, however, addresses itself to the more common, standard techniques. For a discussion of more exotic methods, the reader is directed to works more comprehensive than this one.

When a civilization first embarks on space travel, it is usually concerned only with travel between the planets within its star system. Interplanetary navigation involves tracking the planets within the system and determining the optimum transfer orbits between them. The other stars in the region around the system are used only as "fixed" reference points to determine the location of objects in the system. The word "fixed" is used advisedly, as the stars are in motion; however, their angular movements are insignificant when compared with the objects inside the system.

When the capability for interstellar flight is first achieved by a civilization, new navigational techniques have to be developed to meet the changed requirements. The major requirement of these techniques is to determine precisely the location of the neighboring star systems. Usually, either a spherical or a polar space coordinate system is established, with the civilization's home system as the central reference point. These systems use a series of angles, referenced to different axes, and a distance to locate a star system. Systems of this nature work very well as long as most travel is between the home system and a neighboring one, but they cause great difficulty when travel does not include the home system, as extensive and difficult calculations are required to obtain the relative position of a system.

Later, when other civilizations are contacted, the problem becomes still more complex, since each civilization has developed its own charts, which are incompatible with others. Because each navigation system is centered on a different home system, there is no common basis for locating star systems. These early navigation systems still work while interstellar travel is infrequent. It is possible, although tedious, to work out these navigational anomolies as they arise.

The development of warp drive by Zefram Cochrane in 2050 (Terran) changed the whole concept of space travel. With the ability to make interstellar voyages in weeks, and eventually days, an explosion in interstellar commerce occurred. The critical problem with this expanded trade, from a navigational viewpoint, was that ships could travel farther than was previously possible. The limiting factor in any coordinate system based on angles originating at a single reference point is the accuracy with which those angles can be determined. The greater the distance to a star, the more accurate the angles must be. A small inaccuracy in angular position can cause an error in location that increases with distance from the center of the coordinate system. Eventually, the error can make it difficult or even impossible to locate a distant star system.

When the United Federation of Planets was formed, it was decided to solve this navigation problem by developing a unified navigational system that could be used throughout Federation Space. The rectangular grid system currently in use was chosen, since it allows star systems and other objects to be located precisely, and routes between them to be easily calculated.

1.2 WARP DRIVE

Fundamental to today's interstellar travel has been the development of warp drive. Basically, warp drive consists of the generation of a field about a spacecraft which bends or warps space in the direction of travel. A reaction to the bending propels the ship forward. Since space is being moved relative to itself in a smoothly increasing rate as the center of the field is approached, no neighboring regions exceed the speed of light. However, the total effect on the ship of these incremental speed differences is multi-light velocities. This gradual increase of velocity avoids the speed constraints imposed by the theory of relativity.

The first survey vessels equipped with Cochrane's new space warp drive, such as the S.S. *Bonaventure*, were able to cross interstellar distances in weeks instead of years. A discovery of almost equal magnitude to warp drive was made in the 2160's (Terran), when the Quantum II or "time warp" space drive was perfected. This system is still in use today, and is calibrated on an exponential scale of time warp factors (or simply warp factors). The new time warp drive, so called because of the time dilation effects experienced at warp speeds, enabled the Archon class starships to open vast new frontiers, and extend the boundaries of the Federation by hundreds of parsecs.

The third great breakthrough came in 2243 (Terran), when the "time barrier," warp factor four, was broken by improvements in matter/anti-matter engine design. This made much more energy available, so that more powerful warp field generators could be used. The new propulsion units were quickly installed on the Constitution class starships, and, although capable of speeds up to warp factor eight, they were limited in normal operation to warp factor six by the structural strain caused by the limitations of the ship's compensation field's ability to adequately protect it from the effects of the warp field. Recent discoveries, however, suggest that this limit will soon be exceeded. In theory, warp speeds hundreds of times greater are not impossible for properly designed ships and engines.

1.3 WARP SPEEDS

The classic $W_f^3 \times c = v$ formula (where W_f^3 is the warp factor cubed and c is the speed of light, or about 300,000 kilometers per second) has often been used to determine faster-than-light velocities; but it is obvious that this formula is insufficient if we consider that starships have visited the galactic center,* approximately 30,000 light years distant (a trip which would take thirty years, even at warp factor ten, using this formula).

As Zefram Cochrane pointed out in 2053, actual warp speeds relative to the speed of light may be calculated by multiplying the warp factor cubed by a variable that accounts for the curvature of space in a fourth dimension by the presence of mass; subspace, a continuum in which a vessel under warp drive travels, is not curved in a fourth spatial dimension, and therefore offers a linear "short cut" between points in our galaxy. This variable, called Cochrane's factor and sometimes indicated by the greek letter chi (χ), can be as high as 1,500 in dense dust and gas clouds and as little as 1 in the intergalactic void. It is larger near massive objects such as stars and black holes, as space is curved around such objects to an even greater extent. For practical reasons, warp drive is not used in the vicinity of massive objects, as the disproportionately high warp speeds tend to produce a "slingshot effect," catapulting a starship out of this space-time continuum altogether. Between galaxies, where negligible matter exists, space is not perceptibly curved, and the short cut afforded by Cochrane's factor disappears. Warp speeds attain their "ideal" ($W_f^3 \times c = v$) values, and the transit time to the Andromeda galaxy becomes thousands rather than hundreds of years.

The correct warp factor formula is therefore expressed as $\chi W_f^3 \times c = v$, where the value of χ varies with the local density of matter. This variable, somewhat analogous to the winds or ocean currents in sailing, explains why great interstellar distances may sometimes be traversed at greater speeds and in less time than shorter distances. Accordingly, a navigator must take into account any variations in the density of matter along a given route before he is able to estimate the arrival time at his destination.

Table 1.1 shows the corrected values for warp speeds, given an average value for χ of 1292.7238 within Federation space.

Table 1.1 Corrected Warp Speeds

W_f	W_f^3	χW_f^3	Time per parsec hrs min sec
1	1	1,292.7238	22 05 29
2	8	10,341.7904	02 45 41
3	27	34,903.5426	00 49 05
4	64	82,734.3232	00 20 43
5	125	161,590.4750	00 10 36
6	216	279,228.3407	00 06 08
7	343	443,404.2634	00 03 52
8	512	661,874.5856	00 02 35
9	729	942,395.6502	00 01 49
10	1,000	1,292,723.8	00 01 19

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*See the log of the U. S. S. *Enterprise*, stardate 1254.4

2.0 THE CHARTS

The set of star charts (A, B, C, D) accompanying this manual will help to familiarize the reader with the standard grid system and with the general makeup of our galaxy, the Milky Way. These charts are similar to standard Star Fleet navigation charts, although somewhat simplified, and many of the minor stars and less-frequented planets have been removed for clarity. The charts are arranged in order of increasing detail, starting with an overview of the galaxy and ending with views of specific planets.

2.1 COORDINATE GEOMETRY

This section contains background material on coordinate geometry, and may be skipped if the reader is already familiar with this subject. It is recommended, however, that this section be read as a "refresher course."

Space is a three-dimensional medium; therefore, a three-dimensional coordinate system is used to locate objects within it. This system is similar to that of analytical geometry, a rectangular system of three axes, perpendicular to each other, as shown in figure 2.1.

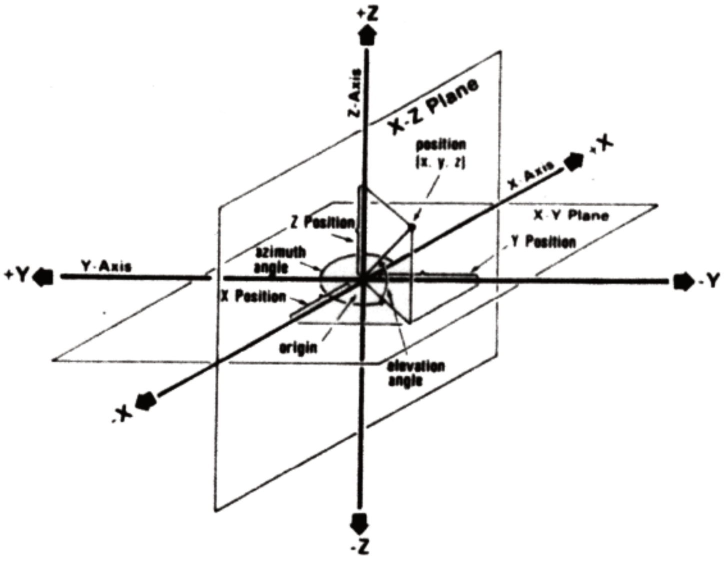

Figure 2.1 Coordinate System

Each axis has been assigned a letter to identify it: *X*, *Y*, or *Z*. The point where all three axes meet is known as the origin (O,O,O), and the axes extend from the origin in both directions, with values given as either positive or negative, depending on the direction. While a single axis may be thought of as a line, any two axes form a plane. Of the three possible planes (*XY*, *XZ*, and *YZ*), only two are used for navigational purposes, the *XY* and the *XZ* planes. The other plane, the *YZ*, is not needed since all of the information contained on it can be found on the other two. All three axes together form a cubic space which may be conveniently divided up into a three-dimensional grid. That is, a series of identical cubes stacked around and on top of each other in three dimensions. Any point in this three-dimensional grid can be located by three coordinates, numbers which correspond to the values of the three axes at that point. The usual order is *X*-axis value, *Y*-axis value, *Z*-axis value, written as (*X*, *Y*, *Z*).

While this rectangular grid system can pinpoint a position in space, it does not provide direction; for a bearing, a spherical system must be used. All angles in this system are expressed either in degrees (°), 1/360th of a circle; or in grads (ᶜ), 1/400th of a circle. A bearing consists of two angles, known as elevation and azimuth. Elevation is defined as the angular distance above or below the *XY* plane; it has a value of zero on the plane itself, and reaches a maximum positive value of +90 degrees (+100 grads) at the plus Z-axis, and a maximum negative value of -90 degrees (-100 grads) at the minus Z-axis. Azimuth s defined as the angular distance on the *XY* plane from the *X*-axis. It is equal to zero at the positive *X*-axis and increases towards the positive *Y*-axis. The two values are usually expressed in the form "(elevation) mark (azimuth)." For example, a bearing of +54 mark 337 degrees.

2.2 LOCATION OF THE FEDERATION

Our galaxy is a spiral star system with a population of about a hundred billion stars, and has a convex lens shape about 30,000 parsecs* in diameter and nearly 4,500 parsecs in thickness. A view of the galaxy from the side Is shown in insert #1 on star chart A. The galaxy, because of its bilateral symmetry, can be divided through its horizontal plane into two equal halves, or "hemispheres." To differentiate between the two halves, quasar 3C 68 is used as a reference point for galactic north, and the half nearest to this quasar is known as the Northern Hemisphere. Conversely, the half away from the quasar is called the Southern Hemisphere. Also shown in inset #1 is a pointer to quasar 3C 294, which, along with the galaxy's center of mass, is used to define the *X*-axis of the standard grid system. The small sphere roughly 30,000 light years, or 9,200 parsecs, from the center is the United Federation of Planets.

By tilting the galaxy about 45 degrees downward, so the viewpoint is from above (inset #2), the spiral arms which make up its outer regions become visible. Also shown are two of the nearer star clusters, NGC 1875 and M 13. These globular clusters are primarily composed of population II stars, older stars that contain few heavy metals. The spiral arms of our galaxy, in contrast, are composed mainly of younger, population I stars.

In inset #3, the galaxy is tilted further to give a top view, looking down on the galaxy from the direction of galactic north. This view clearly shows its overall structure, a series of spiral arms originating from the galactic center in a manner typical of spiral galaxies.

Inset #4 is an enlargement of the area explored by the UFP, a section of the Carina-Cygnus arm near the Orion spur. Parts of the neighboring Sagittarius and Perseus arms are visible. The small sphere near the center of the illustration denotes the Federation. The circle marks the outer boundaries of known space. The reader should bear in mind that Federation space is not a perfect sphere, but rather more closely resembles a somewhat dented ball. These "dents" represent regions under the control of other interstellar groups; such as the Klingon and Romulan Empires. Many planetary systems within the limits of Federation space are not members of the UFP, and space around these systems is considered neutral, and, in some cases, hostile.

2.3 THE GRID SYSTEM

Inset #5 shows the arrangement of the axes and the resulting planes which form the three-dimensional grid system discussed in section 2.1. The origin of the grid system is defined by a central navigation beacon that transmits on both normal and subspace frequencies. To define the axes of the grid two very distant quasars are used as references. The extreme distances to the objects eliminates any parallax distortion in the orientation of the axis in the volume of space covered by the grid. Quasar 3C 294 provides the reference direction for the *X*-axis, 3C 68 the direction of the *Z*-axis, and the *Y*-axis is perpendicular to these axes at the origin. The *X*-axis takes on positive values toward the galactic center, and negative values toward its reference quasar (that is, away from the galactic center). Thereafter, normal geometric construction is followed, with the positive direction of the *Y*-axis at 90 degrees to the positive *X*-axis and the negative direction at 270 degrees. The *Z*-axis is positive in the direction of galactic north and negative in the opposite direction.

Federation space is divided into five major sections, as shown in inset #6: four *quadrants*, numbered 1 through 4, and a central sphere called Quadrant 0 (although not properly a quadrant at all). This sphere, 90 parsecs in radius and centered on the central navigation beacon, is surrounded on all sides by the four outer quadrants which, in turn, are bounded by the *XZ* and *YZ* planes. Although quadrant boundaries can be determined from the position of the central beacon and the two axis-defining quasars, a series of beacons have been installed to precisely mark these boundaries. The name quadrant, although historically correct, is now something of a misnomer, since the four outer quadrants are usually split up into northern and southern halves (as in inset #6) and are thus actually "octants." By convention, the northern half of Quadrant 1 is called Quadrant 1 North, the southern half Quadrant 1 South, and so on.

Inset #7 shows an exploded view of the Federation, clearly delineating the quadrant structure and the division into northern and southern halves.

Quadrants are further divided into *sectors*, as seen in inset #8, arranged in a concentric series of "shells" around the central sphere.

The total volume of each sector is about 4,569 cubic parsecs. The volume of all sectors is kept approximately the same by adjusting the size of the defining angles and shell thickness. There are 1,500 sectors in each of the eight outer quadrants, and 668 sectors (arranged in a similar series of concentric shells) in Quadrant 0.

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*A parsec, the parallax of one second of arc, is the standard unit of distance in interstellar travel, and is equal to 3.26 light-years.

A typical sector from an outermost shell is shown pulled out and enlarged in inset #9. A single sector usually contains a stellar population of less than five hundred stars, low enough to be charted in detail. Each sector is identified by a number which gives the sector's maximum azimuth and elevation angles, as well as its shell number (see figure 2.2). The first two characters of the identification number are the quadrant number and either "N" for north or "S" for south. The third character ranges from "A" to "R," and indicates the greatest elevation angle in the sector. It is marked off in multiples of five degrees (in other words, "A" indicates an elevation of 5°, "B" an elevation of 10°, and so on). The next figure is the shell number, with 1 as the innermost and 10 the outermost shell. The final figure is the local azimuth angle, which is the azimuth angle relative to the quadrant's boundary. It is zero at each boundary, and increases in the same direction as the normal azimuth angle. For example, a sector numbered "4NG-3-50" would be a sector in Quadrant 4 north, and would be in the third shell from the center, with an elevation of between 30 and 40 degrees and an azimuth of between 40 and 50 degrees.

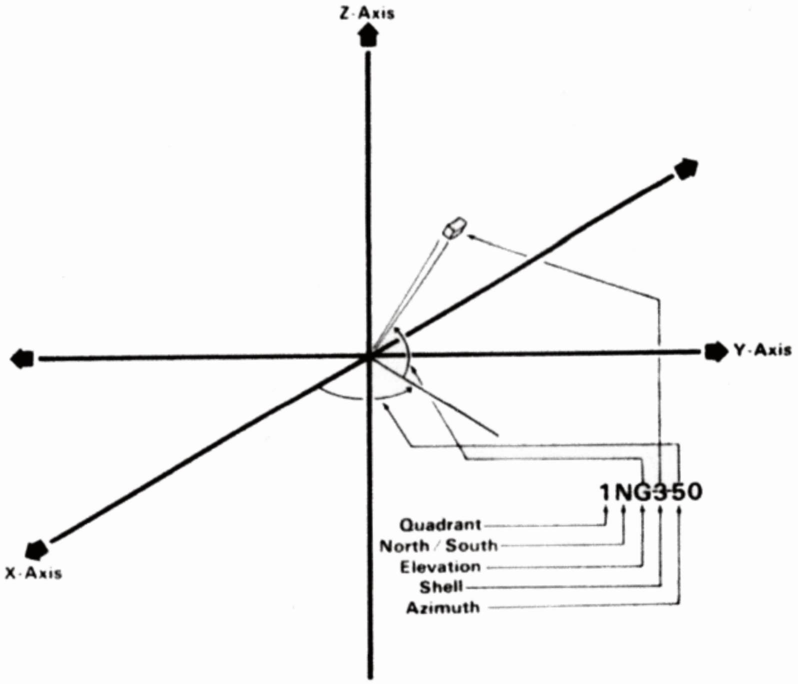

Figure 2.2 Sector Notation

Quadrant 0, the central sphere, is organized somewhat differently than the surrounding quadrants. An overall view is shown in inset #10, indicating some of the more important installations, such as the central navigation beacon, Star Fleet Academy, and major star bases.

2.4 CHART SYMBOLOGY

To understand the astrogation maps, it is necessary to have a working knowledge of the various symbols used. On each chart is a block titled "Map Symbols," which is divided into three sections: symbols describing natural objects, those indicating artificial objects, and a star symbol key.

The size of star symbols on the astrogation maps indicates the absolute magnitude of the system's primary star, the larger the circle, the greater the absolute magnitude, or brightness, of the star. A range of magnitudes from -5 to +9 is shown, and it should be remembered that negative magnitude stars are brighter than positive magnitude stars. This reverse scale is the result of an arbitrary assignment by Terran ancients of bright stars as "first magnitude"; dimmer stars were called second magnitude, third magnitude, and so on. Later, when stars brighter than those of the first magnitude were discovered, they were given negative magnitudes.* The difference in brightness between any two magnitudes is a factor of about 2.5; for example, a third magnitude star is 2.5 times brighter than a fourth magnitude star. To provide some basis for comparison, Rigel is a very bright negative seventh magnitude star, and Sol is a rather dim fifth magnitude star—about 1/40,000 as bright as Rigel. Most stars fall in the range of 0 to +15, and the extreme range for normal stars is −10 to +19.

The color of the star symbols indicates the spectral color of the star, and identifies its spectral class

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*The system used on old Earth (Sol III) was actually one of *apparent* magnitude. The absolute magnitude of a star is its apparent magnitude at a distance of ten parsecs.

according to the letter system currently in use. Each letter identifies a certain temperature and color, ranging from blue-white (spectral class 0) to red (spectral class M). Most inhabited star systems fall into the range F-G-K, mostly yellow and bright orange stars, but a limited zone habitable under Class M† environmental standards may exist around stars of any spectral color.

Binary (double), trinary (triple), and variable stars are also indicated on the maps. Three special symbols are used to mark so-called stellar corpses: novae, neutron stars, and black holes. These objects should be given a wide berth, as all three broadcast a great deal of lethal radiation.

Several lines of data are given for each star on the maps, following the arrangement shown in the star symbol key. The first line, located above the star, gives its most common name, or if the star is not well-known, the star's number in the United Federation Catalag (UFC number). The next line lists any alternate names for the star, usually the astronomical name based on Earth's (or in some cases, Vulcan's) constellations: e.g., Alpha Centauri, 40 Eridani, b Vela. These astronomical names are set in lower-case type to distinguish them from local or common names, which are given in upper-case. The line located below the star gives the total number of planets in the system, and then the planet numbers of any Class M or other important planets. Additional data on these planets may be found in the appendix to this manual.

Artificial objects—star bases, deep space stations, and outpost monitoring stations—are also identified on the maps by their call signs. Major space lanes, the primary routes between inhabited star systems, are indicated on the first two astrogation maps. The two quadrant maps (charts C and D) outline the patrol routes of Constitution class starships and the communications lanes in the Interstellar Communications Network (ICN). These communications lanes must be avoided, as a passing ship may disrupt transmission and will risk damage by the high-energy beams.

Certain star systems and regions of space have been marked on the charts as danger areas, and should be avoided by all vessels. If further information is required, consult the *Space Operations Handbook* or your navigation computer.

2.5 ASTROGATION MAPS

The large central illustration on chart A is astrogation map #1, an overall view of the UFP from the direction of galactic north and showing the stars projected onto the *XY* plane. A reference grid dividing the Federation into units of ten parsecs square is provided, as is a radial gridwork in units of 10 grads (1/40 of a circle). This map shows the location of most of the inhabited star systems and interesting objects in the Federation, as well as major outposts, buoys, and star bases (it should be noted that some star bases are "eclipsed" by others, and in such cases the base with the highest *Z*-axis coordinate is shown). Regions where the UFP border is in contact with other political units, such as the Klingon and Romulan empires and the Tholian Assembly, are noted, as are some of the civilizations bordering the Federation.

Map #1 gives the coordinates of any star in only two of three directions, the *X* and *Y* coordinates; for the *Z*-axis coordinate, a second map is required, and this is astrogation map #2, located in the center of chart B. It is also a planar projection of the stars in the UFP, but this time onto the X-Z plane. The reference gridwork is the same as in map #1.

On the left side of chart B are two additional maps, #3 and #4. These are enlarged views of the most densely populated region of the Federation, a sphere 45 parsecs in radius and centered on Sol. Historically, this region is the oldest part of the Federation, and contains its five founding star systems. These two maps are keyed to the small circles on astrogation maps #1 and #2.

Chart B also illustrates some of the spacecraft, buoys and other objects commonly encountered in Federation space. Space vessels of all types, classes, and origins, Federation and alien, are illustrated, and familiarization drawings for most of these spacecraft are widely available as well. Interested readers are referred to any standard reference handbook such as Mandel's *Fighting Starships* (TM:305953). Detailed information on the various buoys and navigation beacons is given in section 3.4 and following.

Enlarged maps of a typical quadrant, Quadrant 3 South, have been provided to illustrate the normal patrol route of a Constitution class starship, in this case the U. S. S. *Enterprise* (NCC-1701). A view of this quadrant in the *XY* plane is shown in astrogation map #5 on chart C, and a small orientation drawing shows the overall division into sectors. Sector boundaries and the numbers of representative sectors have been included, along with the usual locator grid in units of 10 parsecs. As with the main maps, an additional view, astrogation map #6 on chart D, is needed to provide *Z*-axis coordinates. The normal patrol route of the *Enterprise* is indicated on map #5, although the actual route of the *Enterprise*'s travels over any length of time is likely to be very different; special missions and emergencies frequently make it necessary for starships to divert from their patrol routes, and even to leave their assigned quadrants altogether. Also shown on these maps are some of the less-frequented star systems in this quadrant.

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†Not to be confused with spectral class M; see Chart B

The lower part of chart C contains maps of regions that are not part of the UFP: the Romulan Neutral Zone and the home systems of the Klingon Empire. These maps are keyed to the small rectangles on astrogation map #1.

Many different types of star systems are contained within the borders of the UFP, and to give the reader some idea of this variety, several noteworthy systems are illustrated on charts C and D. The heavily populated Rigel system, a binary system composed of two blue-white giants, is of interest in that it supports so many inhabitable planets—most systems have only one or two planets habitable under Class M requirements.

On the left side of chart D are illustrated some of the more important or interesting planets in and near the UFP. All the planets are illustrated in approximately the same scale, and if the planet has any natural satellites they are shown to scale.

3.0 NAVIGATION

Navigation can be defined as the technique of determining a route from one place to another. When this idea is applied to interstellar travel, however, it becomes somewhat more complex. The large number of stellar systems, the unusual conditions that can be encountered in space, and the traffic density in some areas, make interstellar travel much more difficult than it would first appear. There are some mathematics involved; while not complicated, they must be precise. Even a small error, with the immensities involved in interstellar navigation, can result in a major problem. Most of the required calculations can be done by the navigation computer found on any starship. But a navigator is more than someone who just keys data into a computer. A navigator must have a "feel" for what is being done. A computer can only process data given to it. Navigation requires in addition to this, an understanding of the situation. Sometimes the obvious choice is not the best one, and only someone with the proper training can make the correct decision. The rest of this section gives background in the basic techniques needed for interstellar navigation.

3.1 NAVIGATION COMPUTER SYSTEM

Every interstellar spacecraft is equipped with a navigation computer system. The exact configuration of the system varies from ship to ship, depending upon type of spacecraft and the mission assigned to it. The general organization of a basic navigation system is shown with solid lines in figure 3.1 below. It consists of two major elements: a computer subsystem and several peripheral or external devices attached to it. The computer subsystem is composed of three parts. The central processing unit performs the calculations and logical operations needed for navigation as directed by its programming. The memory bank holds the programs for the processing unit, coded versions of the star charts, tables listing reference data on planetary systems, and other necessary information. An input/output controller is used to transfer data between the computer and the peripheral devices. This unit transfers large blocks of data between the memory bank and each peripheral, independent of the operation of the central processor. It increases the efficiency of the computer by making it unnecessary for the central processor to take time to control each individual data transfer. With this unit data transfers and processing can operate concurrently.

Some peripheral devices provide the computer with information from the external environment. The inertial reference platform provides a continuous attitude reference aligned toward galactic north. No matter what the orientation of the spacecraft, the platform will continue to point to galactic north. Attached to the platform are a group of accelerometers, which measure the ship accelerations. The computer uses the platform for orientation and the acceleration data for velocity and, in turn, position determination. The time standard is an extremely accurate clock, also known as the ship's chronometer. It is used as a time reference when calculating the time delay in signals reaching the ship. The subspace radio, besides being used to pick up subspace beacon signals, is also used for communications. It contains a direction finder which automatically determines the direction of an incoming signal relative to the navigational coordinate system. The electromagnetic, or conventional, radio provides the same functions: signal location and communications, but in this case using signals in the electromagnetic spectrum. The sighting telescope is used to locate reference stars, and contains a spectroscope for accurate stellar identification. The data terminal gives the navigator a means of control and interaction with the system, using a keyboard and various visual displays. On some ships the terminal will also respond to voice commands, and reply with synthesized speech. The data links transfer data between the navigation computer and two other parts of the ship's electronic equipment: the helm controls and the central, or library, computer. The link to the helm is used for loading a course into the autopilot. The library link is used to obtain additional data for the navigation computer or to log course information into a permanent record.

The navigation computer system described above is adequate for most spacecraft, though some of the larger ships, such as the Constitution class starships, have a more extensive system. This is necessary

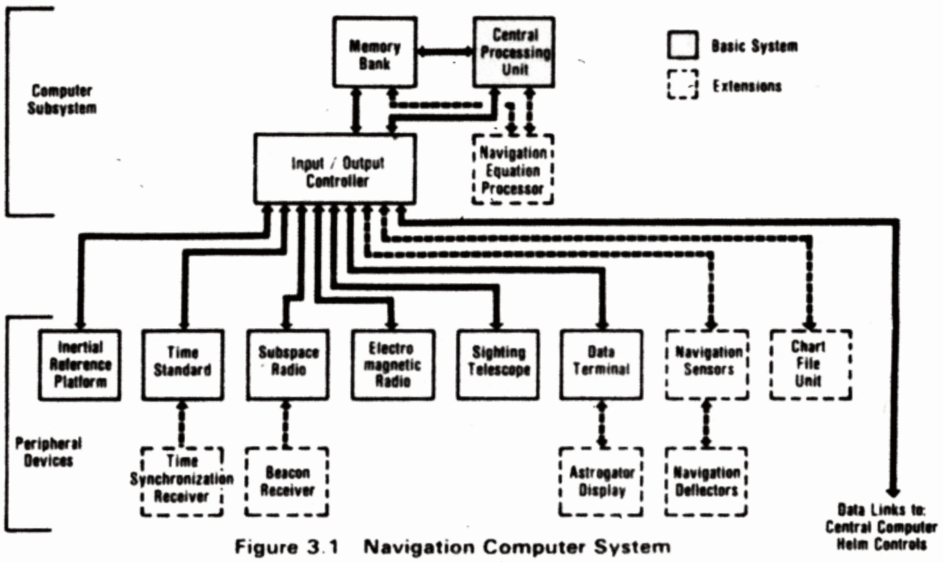


Figure 3.1 Navigation Computer System

because the starships operate in the more distant regions of Federation Space, and more precise calculations are necessary to determine the location of the ship. In addition, these ships continuously chart the regions they travel through. The computer system is enlarged by the addition of equipment, as shown by the broken lines in figure 3.1, to handle this increased data rate. The major addition to the computer subsystem is a navigation equation processor. The function of this specialized unit is to quickly solve navigation equations. It contains special logic hardware designed solely to process navigation equations. In this configuration the central processor merely tells the equation processor what equations are to be solved, where the data to be used are located in the memory bank, and where in the bank to place the results. The equations processor, acting independently, then solves the equations. When it is finished, it informs the central processor that the results are ready to be used. This unit relieves the central processor of practically all mathematical calculations. The primary function of the central processor then becomes overall system control: that is, it coordinates the operation of the equation processor, the input/output controller, and the peripheral devices, so that data is collected, processed, and recorded as required.

The larger computer systems also contain additional peripheral devices. The farther a ship travels away from the center of the UFP, the more critical time standard stability becomes. Any change in the frequency of the standard will cause an error in position determination that increases with distance. To insure the accuracy of the time standard a time-synchronization receiver is installed. This unit receives a fixed-frequency signal transmitted by the central beacon array. Any difference between this frequency and one produced by the time standard generates an error signal which the time standard uses to correct its internal operating frequency. Since a large spacecraft must maintain a continuous check on its position, special beacon receivers are added to the subspace radio. These receivers continually monitor the seven major marker beacons, and any other beacons selected by the navigator. Data received from the beacons, and their positions relative to the ship, are sent to the computer. A large amount of data must be gathered on any object near the ship to accurately chart the region around the spacecraft. An array of high-resolution navigation sensors is employed to collect this information. They are divided into two groups: active sensors, which send out a signal and then examine the response; and passive sensors, which only receive data. Attached to the sensors are the navigation deflectors, a series of cone-shaped force fields with their common apex pointing in the direction of the ship's flight. The function of the deflectors is to move small objects, mostly interstellar gas and dust, out of the path of the ship. Smaller ships have a similar arrangement of sensors and deflectors, which are used only for collision avoidance. Since their purpose is to sound a warning or trigger evasive action if something is too close to the ship, they are of a lower resolution than those of a large ship.

A Constitution class starship may find itself in any part of Federation space. This requires the ship to have very detailed charts of all of known space. A memoray bank large enough to contain all of this information at one time with quick access would be difficult to construct. Fortunately, not all of the material must be instantly available. The computer needs detailed information only on the sector the ship is in, and the twenty-six sectors surrounding it. The remaining information can be stored elsewhere and transferred into the memory bank as needed. This bulk storage is provided by the chart file unit. It holds the remainder of the star charts not currently needed by the computer. It also stores new chart data collected by the computer during the voyage of the ship.

Large spacecraft frequently encounter difficult navigation problems. A special visual display known as an astrogator is used to accurately present the large amount of data needed for the navigator to understand and solve these problems. Located between the helmsman and navigator stations on the helm of Constitution class starships, this 60-centimeter-square display provides a continuous presentation of the region around the ship. The view is normally oriented to show the relative *XY* plane through which the ship is traveling. The direction of travel is at the top of the display screen, and the ship is located in the center. Various manual controls allow changing the scale and orientation of the display. Different types of information can be selected for display. A manually controlled marker, or cursor, can be positioned anywhere on the display screen. It is used to select specific points on the display for more detailed examination. It can also be used to inform the computer of the course to be followed. Different courses can thus be plotted and the best one selected.

In normal operation the computer constantly receives data from the peripheral devices, processes it, and uses the results to produce the course track and present position of the ship. The navigator can at any time use the terminal to gain access to data in the computer. This includes the present position of the ship, its course, the star charts, or any other information in the memory bank of the system. The system has two major functions; determining the position of the ship, and plotting courses. Both of these functions are described in general terms below.

3.2 POSITION DETERMINATION

The best way to find your position in space is to ask your navigation computer. The computer will give you your location coordinates to six decimal places. However, your computer may not always be available. Even with a triply redundant system, failures can occur. The inertial reference platform may "drift" over a length of time. Minor inaccuracies may accumulate to the point that its orientation to galactic north becomes unreliable. It cannot be used in determining the orientation of the ship unless it is recalibrated. Under these conditions the position of a spacecraft can still be determined. The complexity of the technique needed depends on how much of the computer system is available. Of course, the more work that can be done by the computer, the easier it will be for the navigator.

The most accurate method of determining the position of a spacecraft if the inertial reference platform is unavailable is to use the subspace beacon system. This system consists of the central beacon, the beacons defining the quadrant boundaries, and the north and south beacons. Each beacon continually transmits, on a specific frequency, its call sign followed by a code indicating the exact time the transmission was made. Since the speed of propagation of a signal through subspace is proportional to the power of the transmitter, and the power is known, the speed of the signal can be determined. By computing the time difference between when the signal was transmitted and the present time on the ship, the delay, and in turn, the distance from the transmitter, can be calculated. The first step in determining the position of the ship is to calculate the distance between the ship and all seven beacons. The two closest quadrant boundary beacons mark the edges of the quadrant wherein the ship is located. Which sectors of the quadrant the ship is in depends upon whether the north or south beacon is closer. If the north beacon is closer, the ship is in the northern sectors. Likewise, if the south beacon is closer, the ship is in the southern sectors. On rare occasions, when the distance to these two beacons is the same, the ship is on the *XY* plane. It should be remembered that if the distance to the central beacon is less than 90 parsecs the ship is inside the central sphere. This does not change the method of determining the position of the ship; it just means that the ship will not be in one of the quadrants.

In addition to the distances (*a*, *b*, *c*, *r*), the angles between the central beacon and the three closest beacons (*A*, *B*, *C*) are needed. This arrangement is shown in figure 3.2

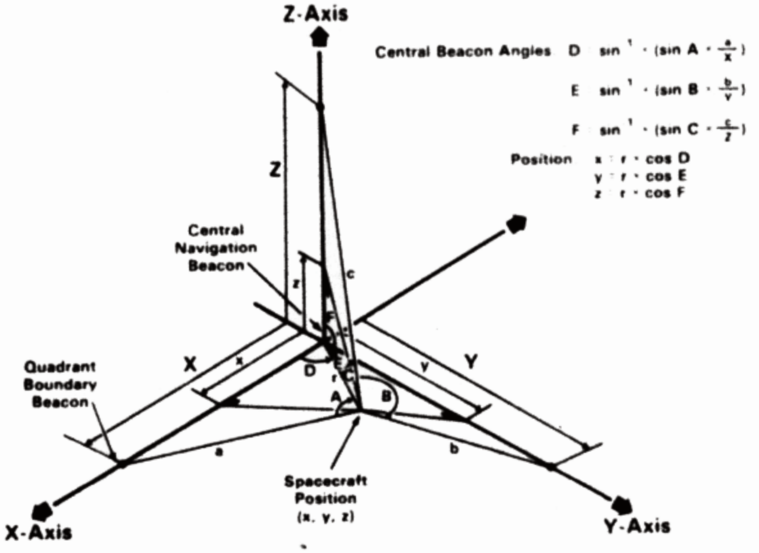

Z-Axis
Central Beacon Angles
$D = \sin^{-1} \cdot (\sin A \cdot \frac{a}{x})$
$E = \sin^{-1} \cdot (\sin B \cdot \frac{b}{y})$
$F = \sin^{-1} \cdot (\sin C \cdot \frac{c}{z})$
Position
$x = r \cdot \cos D$
$y = r \cdot \cos E$
$z = r \cdot \cos F$
Z
Central Navigation Beacon
z
c
F
E
X
x
D
r
A
B
y
Y
Quadrant Boundary Beacon
a
b
Spacecraft Position (x, y, z)
X-Axis
Y-Axis

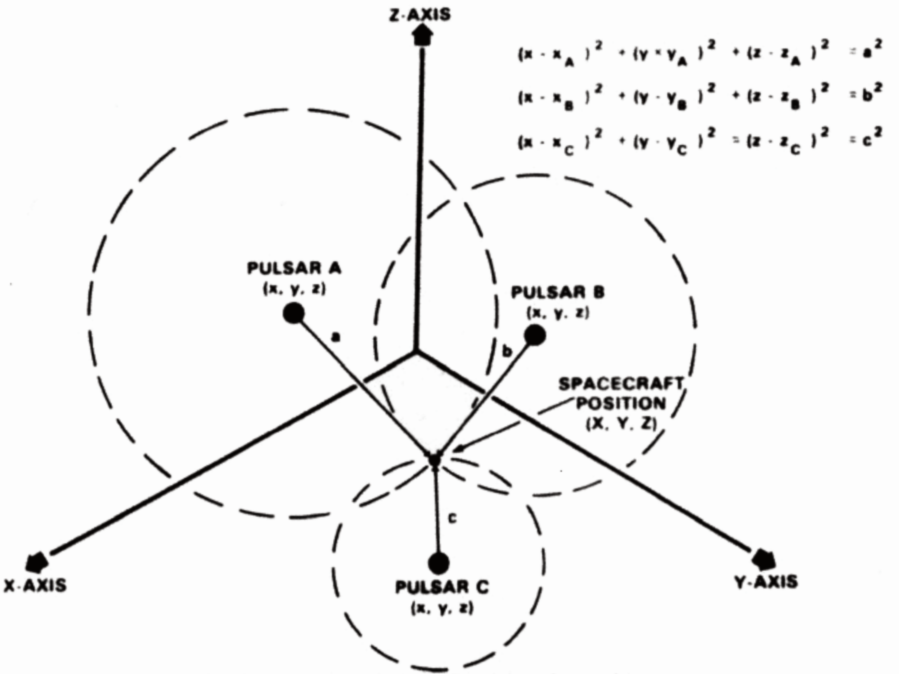
Figure 3.2 Beacon Position Location

The three values calculated using the equations in the above figure are absolute values. They do not have the positive or negative direction needed to locate a ship in the proper region of the grid. The directions are found by noting which beacons were used in the calculations. The *X* and *Y* values take on the same direction as the quadrant boundary beacons used to determine them. The *Z*-axis is positive if the North beacon was used. Conversely, the *Z*-axis is negative if the South beacon was closer. This information is summarized in table 3.1.

Table 3.1 Region Determination

Quadrant Boundary Beacons		Z-axis Beacon	Region	X Value	Y Value	Z Value
+X	+Y	North	Quadrant 1, Northern Sectors	positive	positive	positive
+X	+Y	South	Quadrant 1, Southern Sectors	positive	positive	negative
−X	+Y	North	Quadrant 2, Northern Sectors	negative	positive	positive
−X	+Y	South	Quadrant 2, Southern Sectors	negative	positive	negative
−X	−Y	North	Quadrant 3, Northern Sectors	negative	negative	positive
−X	−Y	South	Quadrant 3, Southern Sectors	negative	negative	negative
+X	−Y	North	Quadrant 4, Northern Sectors	positive	negative	positive
+X	−Y	South	Quadrant 4, Southern Sectors	positive	negative	negative

Another method of determining the position of the ship can be used, if it is not possible for the spacecraft to receive subspace signals. This method uses the various pulsars located in Federation space. Each pulsar, which is actually a rapidly rotating neutron star, has a unique pulse frequency which slowly decreases over time as the rotation of the star slows down. By determining the frequency of the signal received from the pulsar it is possible to identify it. Since the frequency change is linear over time, the present frequency of the pulsar can be calculated. The difference between the two frequencies tells when the signal left the pulsar and in turn the distance from the ship to the pulsar, since the signal travels at the speed of light. This distance defines the radius of a sphere with the pulsar at the center and the spacecraft located somewhere on the surface. If three widely separated pulsars are selected and the distances to them are determined, a series of intersecting spheres is produced. This arrangement is shown in figure 3.3. There is only one point where all three spheres intersect, the location of the spacecraft. To find this point the set of equations shown in figure 3.3 must be solved simultaneously. That is, a set of values for x, y, and x must be found that, when inserted into all three equations at the same time, causes them to balance.



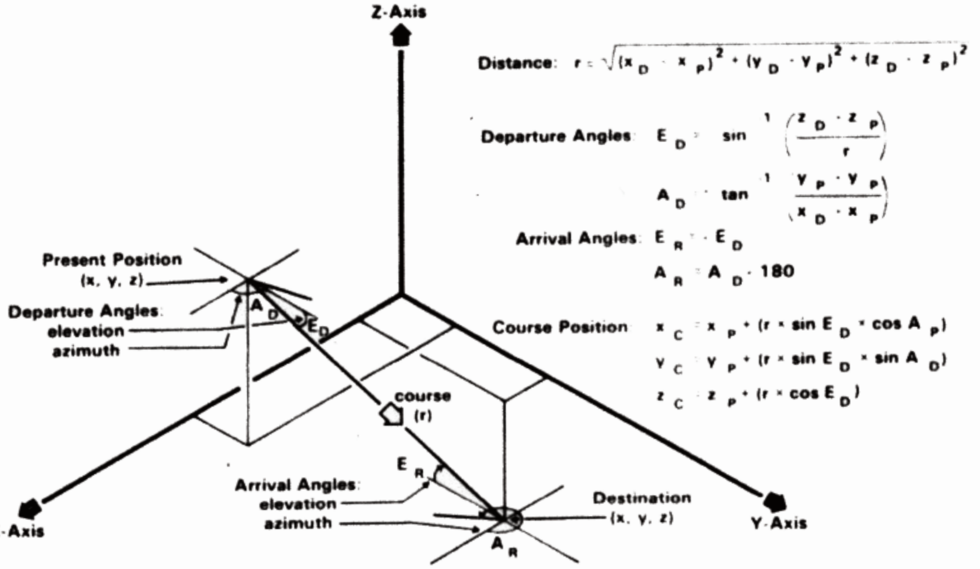
$$(x - x_A)^2 + (y \times y_A)^2 + (z - z_A)^2 = a^2$$
$$(x - x_B)^2 + (y - y_B)^2 + (z - z_B)^2 = b^2$$
$$(x - x_C)^2 + (y - y_C)^2 = (z - z_C)^2 = c^2$$

Figure 3.3 Pulsar Position Location

If all that is available to the navigator is the sighting telescope, the position of the ship can still be determined. This requires the accurate identification by their spectra of several widely spaced stars and calculating the angles between them. The mathematics needed to convert these sightings into a position goes beyond the scope of this introductory manual. A copy of a more advanced text, such as *Navigation Techniques* (TM:300420), should be obtained if the reader is interested in this technique.

3.3 COURSE CALCULATIONS

Once you have determined the coordinates of your present position and found those of your destination from either your computer or a chart, it is possible to plot a course between these two points. A course is defined by two angles, azimuth and elevation. These angles can be referred to in either absolute or relative terms. If they are given on an absolute basis, the angles are based on the stationary grid system with a zero azimuth angle pointing along the positive *X*-axis and a zero elevation angle in the *XY* plane. If the angles are expressed on a relative basis, the present orientation of the ship is used as the zero reference. It is standard for course angles to be given in absolute terms, and a standard terminology has been developed to prevent any confusion over which version is being used. The phrase "come to course" is used when the course angles are given in absolute terms. If the word "steer" is used instead, the angles are relative. For example, "Come to course 37 mark 136" would mean to place the ship on a course with an elevation angle of 37 degrees and an azimuth angle of 136 degrees absolute.



Distance: $r = \sqrt{(x_D - x_P)^2 + (y_D - y_P)^2 + (z_D - z_P)^2}$

Departure Angles: $E_D = \sin^{-1}\left(\frac{z_D - z_P}{r}\right)$

$A_D = \tan^{-1}\left(\frac{y_P - y_P}{x_D - x_P}\right)$

Arrival Angles: $E_R = -E_D$

$A_R = A_D - 180$

Course Position $x_C = x_P + (r \times \sin E_D \times \cos A_P)$

$y_C = y_P + (r \times \sin E_D \times \sin A_D)$

$z_C = z_P + (r \times \cos E_D)$

Figure 3.4 Course Angles

The absolute course angles are found by using the first three equations in figure 3.4. The distance to the destination (*r*) is calculated first. It is the square root of the sum of the squares of the differences in position in each of the three axes. Next, the elevation angle (*E*) and the azimuth angle (*A*) are determined. The elevation angle is the inverse sine of the difference in *Z*-axis positions divided by the distance to the destination. The azimuth angle is the inverse tangent of the difference in *Y*-axis position divided by the difference in *X*-axis positions. These two angles become the departure angles or bearing—the direction in which the ship heads for its destination. (In most cases the arrival angle will be the same as the departure angle relative to the galactic coordinate system.) The navigator should know two other angles, the arrival angles or bearing—these are the absolute angles at which the ship will approach its destination. They are given by the last two equations in the first group on figure 3.4. To find the position of the ship at any point along its course, the second set of equations are used. They convert the departure bearing and the distance travelled into X, Y, and Z coordinates.

The course found using the equations above will take you on a straight line to your destination; however, with the large number of objects in Federation space, that course may not be the safest one. It might take you through such unpleasant places as a black hole, a supernova, or the Klingon Empire. Thus, to avoid such mishaps, once the course has been plotted on the appropriate astrogation map, its track must be examined for any unusual objects. If the track intersects such an object there is the possibility of a conflict. It is only a possibility since the course could be in front or behind the object, and this may not be apparent from the chart. Some calculations are required to determine if there actually is a conflict. The value of one of the axes at the point where your course intersects the object is used as a starting point. With this value the distance along the course and in turn the value of the other two axes can be found. A problem arises only if the value for all three axes match those of the object. The calculations are similar, though a little more complex if the object to be avoided is a line, such as a space lane, or a communications lane since the distance, and the axis values for both, must be calculated. Normally, this determination is done automatically by the navigation computer. It will flash a warning if it detects any conflicts.

If your original course does run into such a conflict, a new route must be chosen. This is done by establishing an intermediate point, known as a "waypoint", at some distance from the problem area. Then course segments, or "legs", are plotted from your present position to the waypoint, and from the waypoint to the destination. Each segment is treated independently, with its own distance, elevation, and azimuth angles.

3.4 AIDS

The UFP has established various aids to reduce the hazards of traveling in interstellar space. The most common are the beacons. These are essentially high-powered, omnidirectional transmitters, which send out signals on both normal and subspace frequencies. Each beacon has an assigned call sign, or identification signal, that it transmits along with additional information that varies depending upon its function.

Position reference beacons are used to define points in Federation Space for navigational purposes, and include three major types: the primary boundary beacons in the subspace beacon system (described in section 2.3), the space lane beacons located at the endpoints of each major lane segment, and those used in the approach position reference system. This latter group is used as a continuous location reference by spacecraft maneuvering in star systems with a high traffic density.

Area marker beacons are used in areas of space that require special identification, and they transmit an identification code and a description of the area they are marking. The difference between the various types of marker beacons is in the strength of their transmission: beacons marking hazards to navigation have an omnidirectional signal pattern and a moderate signal strength, while those marking dangerous regions, such as the area around a nova, have a similar but much stronger signal. Marker beacons are also used to identify individual star systems; it is much easier to home in on a beacon than to locate an object by its grid coordinates. Still another kind of beacon is carried aboard all spacecraft, and transmits the registration number of the ship at regular intervals. This beacon can be used by shuttlecraft and other small vessels to home in on a mother ship, and can be converted into a disaster beacon when necessary, sending out high-power signals designed to attract attention.

The space lanes are another aid set up to assist interstellar travel, connecting most major star systems with other locations within the Federation. Space lanes may not always provide the shortest route, but, because they are free of any obstructions, higher speeds and shorter travel times are possible. A typical segment of a space lane is shown in figure 3.5—each lane segment is numbered, and its endpoints defined by two reference beacons. Each beacon, in addition to its own omnidirectional identification signal, transmits in the direction of the other beacon a directional beam that defines the lane, and an additional directional beam is generated for every other lane segment that uses the beacon.

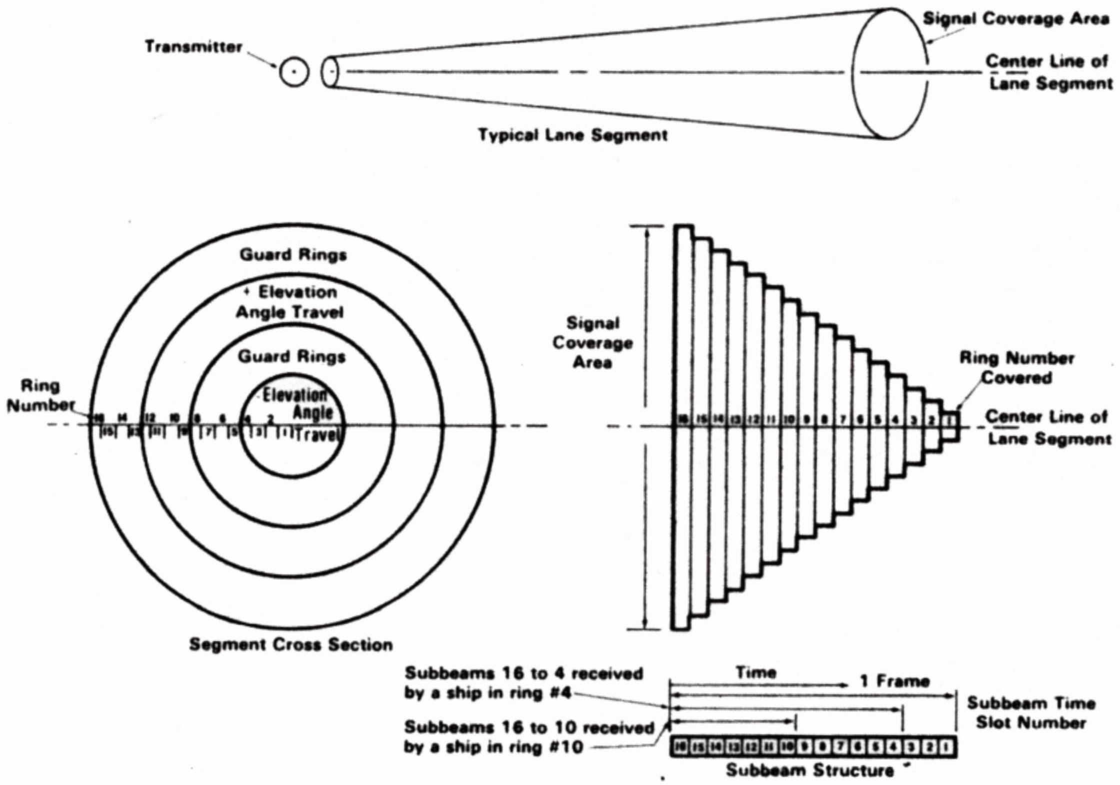


Figure 3.5 Space Lane Segment

To prevent head-on collisions, which at multi-warp speeds can be quite devastating, traffic within a space lane is separated according to direction. Ships traveling on a course with a negative elevation angle use the centermost five rings, and the next four rings outward are reserved for drift correction. The next four rings are for ships on courses with positive elevation angles, and the three outermost rings are again used for drift correction. In the rare instances when the space lane has an elevation angle of zero, a notation is made on the charts to indicate which rings are used for what direction.

3.5 SUPPORT FACILITIES

Throughout Federation Space, a series of support facilities have been established, including star bases, deep space stations, and outpost monitoring stations. Star bases are major military resupply and refitting installations. They contain the supplies, equipment, and personnel needed to repair and outfit any Star Fleet vessel. In addition, they provide training and recreation areas, administrative offices for local command posts, and living quarters for station personnel. Star bases are nearly always located on the surface of a planet because of the size of the facilities and the large amounts of raw materials needed for their operation. They are placed as closely as possible to central points in the Federation grid structure. Currently, there are twenty-eight star bases in Federation Space, and new bases are being constructed at the rate of about two per year.

Deep space stations are major civilian repair, resupply, and refueling facilities, and are also used by military spacecraft when the elaborate facilities of a star base are not necessary. The stations have been strategically located in regions where there are no inhabitable star systems or repair facilities within a reasonable travel distance. Since deep space stations cater to large numbers of passengers, the recreational facilities are more elaborate than those usually found at star bases.

K-Class space stations are located in remote and little-developed regions of the Federation, and are intended for the support of colonization efforts on the Federation frontier. This role requires the station to have large storage areas for supplies being shipped to the colonies, as it would be uneconomical for large cargo ships (the only kind that can reach the frontier) to visit each colony. With a central distribution point, the colonies can obtain supplies as needed with little delay and at lowest cost. These stations have extensive refueling facilities, since new colonies generally do not have their own fuel-producing plants.

Outpost monitoring stations are small installations established by Star Fleet to keep watch over sensitive regions of the Federation. A monitoring station may be based on a planet, or located in an asteroid moved into the desired position, and normally consists of a large sensor array, support equipment, and crew quarters. For the most part, monitoring stations are located along the foreign boundaries in the Federation, such as those along the Romulan Neutral Zone. Recently, the Epsilon series of monitoring stations were constructed near the boundary of the Klingon Empire to gather intelligence data and watch for any violation of the Organian Peace Treaty. Due to the classified nature of the function and their limited facilities, they are normally off limits to civilian craft.

Located in the *XY* plane of the Federation is a network of 32 automatic communications relays, small planetoid-based stations designated by a greek letter and number; Alpha-1 for the first relay in Quadrant 1, Alpha-2 for the second, and so on, up to Delta-8 for the eighth relay in Quadrant 4. These stations broadcast a periodic space conditions report, prepared by the UFP to inform vessels of sudden changes in travel conditions: unpredictable events like large solar flares, novae and ion storms can change a safe region of space into a hazardous one almost instantaneously. Relay stations can also receive subspace messages transmitted by starships, and rebroadcast them at much greater power levels, which effectively connects any vessel with any other vessel or planet within broadcast range of the Interstellar Communications Network.

The final aid based at space stations is the search and rescue unit. Every station maintains at least one rescue ship in constant readiness. Whenever an emergency call or disaster beacon is detected, one of these ships is launched to investigate, and give aid where possible. It is a major offense to ignore a distress signal. All ships receiving a distress call must respond with all due haste and render all possible assistance.

3.6 DEEP SPACE PROCEDURES

While the basic techniques of navigation described will get a ship from place to place, the high traffic density in some regions of the UFP have made it necessary to establish operating procedures for spacecraft. The procedures are divided into two classifications: near space operations, those close to a star system; and deep space operations, those between star systems.

It is possible to get to any place in known space by setting up a series of course legs and then following them. This is not recommended for routine travel because, should an emergency arise while on a non-standard route, a ship may be so far from aid that rescue would be impossible. Many ships have disappeared without a trace on what looked like a simple voyage. The space lanes should be used whenever possible, because aid is quickly available should it be needed.

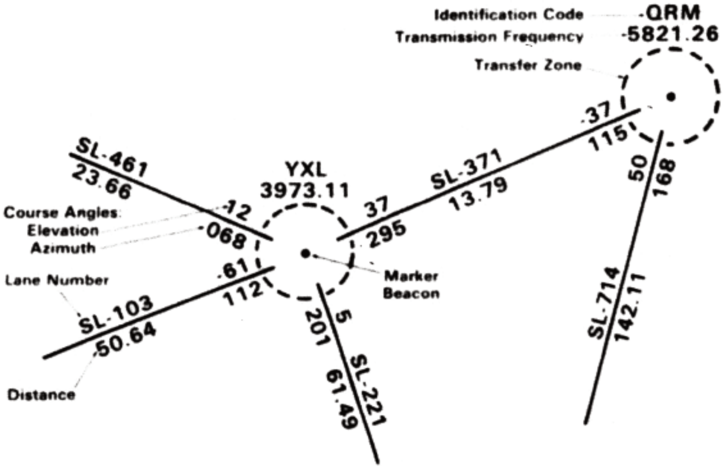


Figure 3.6 Space Lanes

A typical group of space lanes, as they appear on the standard charts, is shown in figure 3.6. The location of each reference beacon is shown, along with its call sign and subspace transmission frequency. Each lane segment has an identification number and length. At each beacon the bearing for the lane to the next beacon is given. Around each beacon is a transfer zone, which is the volume used by ships to change lanes. It is also used to enter or exit the lane system. To use the space lanes, a course is plotted to the nearest reference beacon; when the ship enters the transfer zone, it is maneuvered into the selected lane and positioned on the directional beam in the proper ring for its direction. When the ship reaches the transfer zone at the end of the lane segment it transfers to the next lane segment. This is continued until the reference beacon closest to the destination is reached. A direct course from that beacon to the final destination is then followed. Extra caution must be observed when in a transfer zone to avoid other spacecraft, since a large number may be in the zone.

All interstellar spacecraft are equipped with subspace radio, the primary means of communication over interstellar distances. Conventional, or electromagnetic, radios are of limited use because their signals can travel only at the speed of light; too slow for interstellar use (but still useful for short range applications such as between ships orbiting the same planet or between a ship and landing party). The major difference between subspace and conventional radio is that the speed of propagation of a wave in subspace is proportional to the strength of the signal; the stronger the signal, the faster it will travel. In addition, a directional beam will travel faster than an omnidirectional beam of the same power. The amplitude of the signal decays over time, eventually reaching a level too low to be detected; this imposes a range limit on subspace transmissions, and the result is that stronger signals can be received more quickly and at greater distances than weaker ones. In practical terms, signals from large installations, such as communications relays and star bases with high-power transmitters, are received sooner than those from spacecraft, which cannot carry transmitters as powerful. This means that although a starship can receive messages from its home base in relatively little time, a reply may take weeks, or may never reach the base at all.

Specific subspace frequencies are assigned to routine message traffic and should be used whenever possible. Another group of frequencies, the so-called hailing frequencies, are set aside for short-range ship-to-ship and ship-to-planet communications. These frequencies are spread over the entire electromagnetic and subspace spectrums. Any ship should be able to receive at least one. Emergency transmissions are assigned to still another frequency band, monitored at all times by ships and fixed stations.

3.7 NEAR SPACE TECHNIQUES

Near space techniques concern the operation of a spacecraft within a star system, and vary somewhat depending on the traffic density of the system. For all explored systems within the UFP a detailed approach chart is available. These charts show in great detail the orbits of the various stars, and planets, and their satellites, in the system along with other objects such as asteroid belts and comets. Unusual conditions, large radiation fields, for example, are also marked. The inclination of each object, along with a reference position relative to the grid system and orbital velocity data, is provided so that its present location can be calculated. In some cases, where a system has heavy traffic, additional charts are provided of the major planets indicating approach patterns, and any special conditions such as power transmission and communications beams from satellites.

In addition to the approach charts, a classification system has been set up to group star systems according to their traffic and control facilities. A class number is assigned to each star system with higher numbers going to systems with greater traffic. This numbering should not be confused with the letter system that classifies individual planets according to their composition and environment.

If the star system has no routine traffic (class 0), the procedure is very simple: enter the system from any direction and establish a standard synchronous orbit around the planet of interest. Conditions of this nature are normally found only in an unexplored system.

Class 1 and 2 systems have moderate traffic densities, with a few ships arriving and departing at any given time. The procedures in these cases are not much more complex. The approach charts of these systems show an identification boundary located outside the orbit of the last planet of the system. Any spacecraft crossing this boundary must identify itself to the system's space control. The space control operator will then acknowledge entry and provide information on the other ships in the system. With this information, a course may be plotted to the planet of interest and a standard orbit established.

When entering a system with high traffic density (class 3 or 4), the procedures are more complex. All spacecraft entering such systems must use the approach position reference system, and turn over maneuvering control to an external traffic computer system. This external control is necessary to prevent collisions, as a large number of ships, as many as several thousand at any given time, are all converging on the same point. The approach position reference system consists of four beacons equally spaced in an orbit just inside the identification boundary of the system, as shown in figure 3.7. Taken together, they form a square with each beacon located at each corner. Each beacon transmits a very narrow directional beam which changes frequency as it scans from one edge of the square to the next. Since each point inside the square will receive only one combination of frequencies from the beacons, position can be quickly determined by comparing the frequencies received with a reference table. The traffic computer system is composed of a sophisticated computer, which keeps track of all spacecraft within the system, and calculates the optimum path and orbital position for each ship. It then transmits maneuvering instructions from the beacons to all ships in the system.

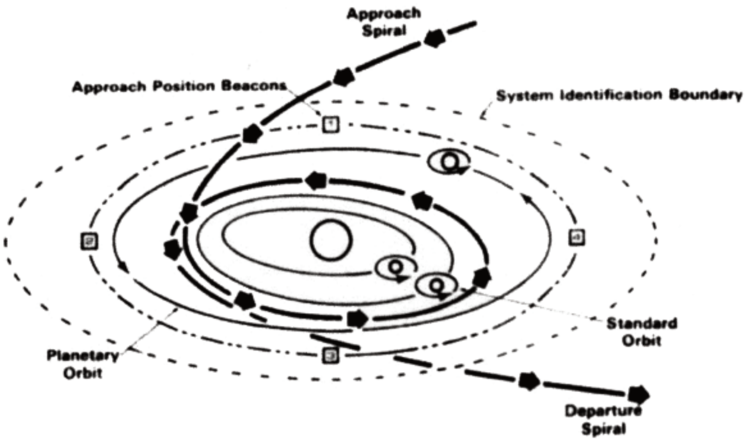


Figure 3.7 Approach Procedures

Ships approaching a system generally follow a spiral that is above the plane of the ecliptic of the system and in the direction of the orbital motion of the planets; departure spirals are from below the ecliptic, and in the direction of orbital motion.

4.0 REGULATIONS

Early in the history of the Federation few regulations, if any, were needed to insure safe interstellar travel. It was thought that the distances involved were so vast and the vessels so few that regulation of traffic would never be needed. With the large increase in interstellar traffic following the development of the time warp drive, it became obvious that such regulations would, in fact, be necessary to prevent collisions in heavily populated space, and to insure the competency of starship pilots. A federation agency was appointed to supervise three major areas: the design safety, maintenance, and operation of space vessels; regulations governing traffic between star systems; and those governing traffic within a star system.
systems; and those governing traffic within a star system.

4.1 SHIP REQUIREMENTS

Every interstellar spacecraft must fulfill certain requirements concerning crew and equipment; for example, the captain of the ship must have a first class master's license, and all crew members must have licenses appropriate to their duties. The spacecraft itself must be inspected at regular intervals to insure that critical components and equipment are operable, and the propulsion and life support systems properly maintained. Safety-related items such as environmental suits and life support belts are mandatory, and on larger ships shuttlecraft or lifeboats are required. Starships must have emergency transporters capable of sending the entire ship's complement down to a planet's surface.

4.2 DEEP SPACE OPERATIONS

The most important prerequisite to deep space travel is a flight plan. All ships except military vessels on special missions must file, with the space control of the system they are departing, a flight plan containing a description of the route to be followed, including any stops, and an estimated time of arrival at the final destination. If any major changes have to be made following departure, the space control where the plan was originally filed must be informed via the inroute communications system. A flight plan gives some idea of the traffic flow, and provides a starting point for a search if the ship is overdue at its destination.

Ships traveling in deep space must be aware of special regions that are proscribed as hazardous or quarantined under Federation mandates. *Warning areas* are regions where hazardous operations may be taking place, such as gunnery practice or war games. *Danger areas* include major hazards to navigation, such as novae and black holes, and areas where unusual and possibly hazardous operations take place on a regular basis. *Prohibited areas* are regions where contact by any spacecraft is forbidden, such as critical Federation installations, and star systems protected under the Prime Directive of Non-interference.

In addition to the special regions set up by the UFP, the star systems in Federation space that are not members have, in some cases, set up their own regulations governing the operation of spacecraft within their zones of influence. For example, the Melkotian system until recently requested that spacecraft not enter its territorial sphere, and placed warning buoys to that end on the border of its space. Detailed information regarding the regulations that apply in such systems can be found in the *Space Operations Handbook*, under the reference number of the region.

Emergencies in deep space are rare, but when one does occur, immediate action is necessary to prevent possible catastrophe. All spacecraft are required to carry an identification beacon which can be used to transmit an emergency signal, and large spacecraft have in addition a recorder-marker which can be ejected at the first sign of danger.

These beacons are to be used only in the event of an emergency which is defined as a situation in which loss of life or the destruction of a ship is imminent and the prompt summoning of assistance is critical. The use of an emergency signal at any other time will result in severe penalties. An emergency immediately takes priority over all other activities. Any spacecraft receiving an emergency signal must make all possible efforts to render assistance. While Star Fleet search and rescue units are dispatched whenever an emergency signal is detected, it may be some time before they arrive; thus the aid that can be provided by other spacecraft in the region of the emergency is critical. The difference of only a few minutes in aid reaching a ship can be crucial. There are severe penalties for the commander of a ship that does not respond to an emergency.

4.3 NEAR SPACE OPERATIONS

The regulations governing ship operations near or inside a star system have as their primary objective the safe movement of large numbers of spacecraft in a limited region. Most of the time the ship will be on its own for the final approach to a planet. Under these conditions the navigator has certain responsibilities. The approach must not interfere with any existing traffic in the system, and must be compatible with any established interplanetary traffic patterns. The orbit established must be clear of communication and power beams, and be at a high enough altitude so that it will not decay. Also, the approach chart for the system should be checked for specific approach requirements and any special or unusual conditions.

Whenever a ship is in a controlled system the space control of the system has the final authority over ship movement. Any instructions received must be followed precisely and immediately. Failure to do so can result in great danger to the other ships in the system. If a ship is unable to comply with the instructions from space control because of equipment failure or other difficulties, space control must be informed of the problem. A rescue ship will be dispatched to assist if the ship is unable to correct the problem on its own. In the event that the ship's radio is rendered inoperative, the ship must maintain its present course and speed. The space control computer will detect the non-compliance with succeeding instructions, and a ship will be sent to investigate.

5.0 VOYAGES OF THE *ENTERPRISE*

Of the intragalactic starships currently in use, the Constitution class (MK—IX/01 model) is the most sophisticated and certainly the most versatile; no other vessel is capable of crossing the Federation in less than a month, or carries thirteen science labs along with the armament to destroy an entire planet. Starships like the U. S. S. *Enterprise* have been probing the outer regions of our galaxy for over five decades, and have dealt with navigation problems that range from the simple to the extraordinarily complex. They can provide many practical examples of the procedures outlined in this manual.

The first example involves a simple course calculation. On stardate 3013.2, General Order Seven was temporarily suspended when the *Enterprise* traveled from Star Base 11 (where it had been berthed for routine maintenance following an ion storm) to planet four in the Talos star group. Since there were no obstructions between the base and Talos, a direct course was plotted. The bearing to reach Talos IV was determined by taking the position of the star base (−90.00, 0.00, 0.00) and that of the star system (−119.45, −43.73, −24.00) and applying the equations in figure 3.4. The result is a distance to Talos IV of 57.93 parsecs, on a bearing of −27.47 mark 236.04. The *Enterprise* accelerated to warp factor six and reached the Talos system in about six hours.

A course that includes a waypoint is only slightly more complex than a direct one. The *Enterprise* was directed on star date 1704.2 to collect data on the break-up of planet Psi 2000. It had just completed a survey of Alfa 177, and was ready for its next assignment. The direct course to Psi 2000 from Alfa 177 is 38.6 mark 112.6, with a distance of 46.4 parsecs. Unfortunately this course was unusable; it would cause the *Enterprise* to pass much too close to a recently discovered black hole located at (−44.3, −33.9, 46.1). To avoid the black hole, the navigator established a waypoint outside of its influence. Normally the actual location of a waypoint is somewhat arbitrary. Any point in space that would take the course of the ship sufficiently far from the hole would be adequate. However, this time the navigator had another constraint to worry about; the route had to be as short as possible, so that the maximum amount of data on Psi 2000 could be collected. Taking all of these factors into account, the waypoint was positioned at (−43.00, −33.0, −44.0), just beyond the influence of the hole. The first leg of the revised course ran from Alfa 177 on a bearing of 31.5 mark 108.9 for a distance of 24.3 parsecs to the waypoint. The second leg, from the waypoint to Psi 2000, had a bearing of 25.8 mark 116.4 and a distance of 22.2 parsecs. This course had a slightly longer distance, 46.5 parsecs, than the direct course, but it did avoid the black hole and got the *Enterprise* to its destination in time to record the breakup. What happened to the ship and its crew after it reached Psi 2000 had nothing to do with navigation.

Since the *Enterprise* normally patrols the outer regions of the Federation, it does not ordinarily use the space lanes. However, on stardate 3372.7, the *Enterprise* was en route to Altair VI to attend the inauguration of the new system president when it became necessary to detour to Vulcan. Since the region between Altair and Vulcan has a high traffic density, the space lanes provided the fastest route. The *Enterprise* entered the space lane system at the UAZ beacon, taking space lane SL−488 to the YTP beacon. At that beacon, it transferred to space lane SL−107 and followed it to the VLN beacon, which is the closest point to the 40 Eridani system. Since 40 Eridani is a class 4 system, the *Enterprise* requested an approach course from Vulcan Space Central. Approach was authorized, and the *Enterprise* automatically guided by the approach position system into a synchronous parking orbit around Vulcan.

Starships spend the majority of their time traveling between star systems. Very seldom is there any extensive travel among the planets of a system. However, since the *Enterprise* has undertaken a wide variety of missions, such travel has at times been necessary. One example occurred on stardate 4842.6, when the mission of the *Enterprise* was to divert the course of an asteroid. The asteroid was on a hyperbolic trajectory toward UFC−3222877. Its path would take it into the system, around the star on a comet-like approach, then back into deep space. However, as the asteroid approached the orbit of the third planet, Amerind, it would find the planet directly in its path. The resulting collision would devastate Amerind, destroying its humanoid culture. It was therefore planned to have the *Enterprise* use its deflectors to push the asteroid into a new trajectory which would cause it to pass the star at a greater distance, missing Amerind in the process. Unfortunately events did not work out as planned. Delayed by attempts to locate its missing captain, the *Enterprise* was forced to use a higher than recommended speed to reach the calculated deflection point in time. This caused its engines to become seriously stressed. The acting commander still tried to alter the course of the asteroid, but succeeded only in causing a power overload which rendered the warp drive inoperative. The *Enterprise* then fell back on its impulse power for propulsion. Under impulse power a starship behaves like a sublight interplanetary spacecraft. The navigator plotted a return course to Amerind which took into account the position of the *Enterprise*, the orbit of Amerind, and the limited speed available. The resulting course turned out to be the same as that of the asteroid with a travel time of 60 days. Fortunately, by the time the planet was reached it was discovered how to operate a meteor deflector located on Amerind, and the collision was prevented.

TIME LINE OF *STAR TREK* HISTORY

Because the Stardates used in the TV series are not in sequence, they are not useful for showing how long it has been since Captain Pike commanded the *Enterprise,* for instance. All new FASA products will use a system of Reference Stardates to measure the absolute passage of time in the *STAR TREK* universe. They will pass at a regular rate, as measured from the communications beacon at the center of Federation space. They will form a sort of 'Greenwich Mean Time' for the events important to *STAR TREK* 'history,' and FASA will use them in placing events in the timeline they develop for their adventures and supplements.

The numbering system for Reference Stardates is the same as that given above, with one exception. A number followed by a slash will always preceed the standard Stardate to show the century. The Reference Stardating system will begin with 0/0001.01 meaning January 1,2000. Thus, 1/0001.01 is exactly 100 years later (January 1 2100), and -1/0001.01 is exactly 100 years earlier (January 1, 1900). The Reference Stardate for July 4, 1776, is -3/7607.04, and so on.

Stardate -1/3011.19

Visionary social worker Edith Keeler is killed in an accident while crossing the street. The event is witnessed by Kirk, Spock and McCoy while time-travelling using the Guardian of Forever.

Stardate -1/6701.26

Captain John Christopher, an Air Force interceptor pilot, reports a UFO, but it soon disappears from view. The UFO is the *Enterprise,* warped back in time and appearing in Earth's atmosphere over the United States Of America.

Stardate -1/6803.29

Travelling in time, the crew of the Enterprise encounters Supervisor 194, Gary Seven, on an assignment to prevent 20th-century Earth (henceforth called Terra) from destroying itself in nuclear war.

Stardate -1/6907.20

Neil Armstrong becomes the first Human to step foot on Terra's moon, starting Human manned interplanetary exploration.

Stardate -1/9206 - 9609

The outbreak of the Eugenics Wars limits manned space efforts for a time, as resources are turned to global war.

Stardate -1/9609.22

SS Botany Bay, a converted *DY-100* interplanetary vessel with cryogenic sleep capsules installed, leaves Terra carrying 97 refugees from among the genetic 'supermen' who sparked and led the Eugenics Wars. In command is Khan Noonian Singh, the greatest dictator of the Wars.

Stardate -1/9704.18

The first permanent base on Terra's Moon is established, jointly funded by the United States Of America and Japan. This marks the rededication of Terran peoples to space exploration as part of the rebuilding following the Eugenics Wars.

Stardate -1/9904

Large-scale asteroid mining opens up Sol's Asteroid Belt to colonization. Several more lunar stations are opened this year by various nations and several private corporations. Armstrong Center, remaining the largest, has become a small city of scientists, technicians and support personnel, and already is beginning to cater to a growing tourist trade.

Stardate 0/0001.01

January 1, 2000, the base date for Reference Stardate system. On this date, the Science Council of Luna declares itself independent of the governments of the United States Of America and Japan and requests status as a United Nations protectorate. Such status is granted, forming the first interplanetary Human government.

Stardate 0/2011.17

The *Nomad* probe is launched from Terran orbit. It is lost in space and presumed destroyed.

Stardate 0/3605

New space-time researches find holes in the general theory of relativity, making faster-than-light communication and travel theoretically possible, though not yet an actuality.

Stardate 0/4202.25

The first manned expedition is launched to Alpha Centauri in a high-acceleration, sub-light-speed *Bussard* ramjet.

Stardate 0/4806.23

Contact is established with a humanoid culture on Alpha Centauri by the first manned, Terran expedition.

Stardate 0/4812

Alpha Centauri scientist Zephram Cochrane formulates the initial warp drive calculations, making faster-than-light travel possible and, eventually, practical.

Stardate 0/5507 through 5909

The first experimental warp-drive ships are tested by Terra and Alpha Centauri research teams.

Stardate 0/6201

The Fundamental Declarations of the Martian Colonies establishes independent government for all off-planet Terran colonies. Zephram Cochrane disappears.

Stardate 0/6511

First contact occurs with the Vulcans, when a warp-drive probe encounters a Vulcan colony world. Vulcan has already developed the warp drive, and Vulcan techniques substantially improve on the original design.

Stardate 0/7104 through 7301

First commercial space ventures by Vulcan, Terra, and Alpha Centauri.

Stardate 0/7308

First contact occurs with the Tellarites.

Stardate 0/7511

First contact occurs with the Andorians nearly ends in disaster when an Andorian starship fires on a Terran exploratory vessel. Terra prepares for war, but cooler heads on Vulcan convince Terra leaders to try and negotiate with the growing Andorian empire.

Stardate 0/7703

The First Alpha Centauri Conference preserves the peace, with Vulcan diplomats convincing Andor that it has nothing to gain and everything to lose by fighting Terra and her allies. Andor joins the alliance.

Stardate 0/7907

First contact occurs with the Orion Colony worlds in the Rigel system.

Stardate 0/8706.06

Articles of Federation are signed at the First Babel Conference, establishing the United Federation of Planets. The original signatory powers include Terra, Alpha Centauri, Vulcan, Andor, and Tellar. The Rigel/Orion Colonies, remain outside the Federation entirely.

Stardate 0/9109

Star Fleet Academy is founded.

Stardate 0/9211

First contact with the Romulan Star Empire occurs when a cargo ship is captured by Romulan forces.

Stardate 1/0610

War is declared between the Federation and the Romulan Star Empire.

Stardate 1/0909

The Romulan War is ended inconclusively, after staggering losses on both sides. The treaty, negotiated by subspace radio, establishes a Neutral Zone, and no ships are allowed to cross between the two powers. No Federation forces have seen a Romulan face-to-face throughout the entire war, mostly because the Romulans refuse to allow a ship to be captured intact.

Stardate 1/0910 through 2412

Peace reigns, but the Orion Colonies know that the existence of the Federation will soon be discovered by the Klingon Empire. The Colonies sign non-aggression and trade treaties with the Federation, but do not join the UFP.

Stardate 1/5105

First contact with the Klingon Empire leads immediately to conflict. Orion colonies declare neutrality and trade with both groups. Klingon raids on Federation shipping often masquerade as Orion-based pirates – and vice-versa.

Stardate 1/7407

The transporter (originally called the materializer) is invented.

Stardate 1/7603

Dilithium is first mined and used for power rectifiers in warp drives.

Stardate 1/8801.04

Star Fleet's *Constitution*-class ships become operational with the commissioning of the *USS Constitution*. Less than 1 month later, the *USS Enterprise* is commissioned, under Captain Robert April.

Stardate 1/9001

After a 2-year, shakedown cruise, the first standard, five-year mission of the *Enterprise* begins, under Capt. April.

Stardate 1/9409

Klingon forces ally with the Axanar star system to begin the Four Years War. Captain Garth of Izar prevents the Klingons from establishing supply lines to and from Axanar and is awarded the Federation Medal of Valor.

Stardate 1/9501

Capt. April retires from Star Fleet and becomes a Federation ambassador.

Stardate 1/9506

Capt. Christopher Pike is given command of the *Enterprise.*

Stardate 1/9608

Upon Capt. Pike's recommendation, Talos IV is quarantined by the Federation.

Stardate 1/9806

The Four Years War ends with the success of the Axanar Peace Mission. The phaser replaces the laser as the Federation's primary weapons system.

Stardate 2/0105

Green Slave trade is abolished outside strict limits of Orion neutrality area by UFP intervention. Economic sanctions by the UFP force Orion Colonies to abolish the slave trade – officially.

Stardate 2/0704

After the promotion of Capt. Pike to the position of Fleet Captain over *Constitution*-class vessel operations, his hand-picked successor, Capt. James T. Kirk, becomes the youngest man to ever command a *Constitution*-class vessel.

Stardate 2/0704 through 0803

The adventures occur that are related in the first season of the *STAR TREK* TV series.

Stardate 2/0705

Lt. Cmdr. Gary Mitchell, First Officer of the *Enterprise,* is killed in the line of duty after contact with the Energy Barrier at the edge of the galaxy. Lt. Cmdr. Spock, at the request of Capt. Kirk, is made First Officer as well as Chief Science Officer. He is the first person to ever hold both positions simultaneously on a major Star Fleet vessel.

Stardate 2/0801.09

The Organian Peace Treaty is imposed by the Organians on both Federation and Klingon forces, thus averting a second Klingon war. The Organian Treaty Zone is established by negotiation over the next 3 months.

Stardate 2/0801.24

The first Federation contact with the Gorn occurs.

Stardate 2/0803 through 0903

The adventures occur as related in the second season of the *STAR TREK* TV series.

Stardate 2/0811

In recognition of outstanding service as both First Officer and Chief Science Officer of the *Enterprise,* Lt. Cmdr. Spock is promoted to full Commander.

Stardate 2/0902

The Babel Conference on the Coridan question is settled by the inspired oratory of Sarek of Vulcan. Coridan is made a UFP protectorate. The first of a series of Romulan/Klingon non-aggression and technological exchange treaties are signed in secret.

Stardate 2/0903 through 1003

The adventures occur as related in the third season of the *STAR TREK* TV series.

Stardate 2/1102

The *Enterprise* participates in a Star Fleet intelligence operation to seize a protype of a new Romulan cloaking device. Enterprise escapes with the device and confirmation of a Klingon-Romulan technological agreement. The device works once when they escape from the Romulan Neutral Zone, but it later fails to function when detached from the *Enterprise* for study. The mechanism is examined and duplicated by UFP scientists, but the protype fails in a particularly nasty fashion, and all research and development aimed toward making cloaking devices operational on Federation ships is halted.

Stardate 2/1003.01

The first Federation contact with the Tholians occurs, though the Vulcans were aware of the presence.

Stardate 2/1003 through 1103

The adventures occur as related in the *STAR TREK* animated series.

Stardate 2/1103 through 1203

Stardate 2/1204

The *Enterprise* returns from it's five-year mission under Capt. James T. Kirk. It is the only ship remaining from the first group of *Constitution*-class vessels; all others have been lost in service.

Stardate 2/1204

Capt. James Kirk promoted to Commodore upon the triumphal return of the *USS Enterprise.* It is the only remaining ship of the first group of *Constitution*-class vessels, all others have been lost in service. Star Fleet, riding the crest of a publicity wave, decorates Kirk and most of the top officers and grants them six-months leave. Star Fleet adopts the *Enterprise* identification symbol as the official Star Fleet emblem, abolishing the practice of individualized emblems for each ship.

Stardate 2/1204 through 1210

Commodore James Kirk spends much of his shore leave successfully using his influence and prestige to assure Star Fleet's continued vigilant, but non-militant, activities in the face of increased Klingon aggression outside the Neutral Zone. Upon his return, he becomes Chief Of Star Fleet Operations to assure that his proposals are carried out. Kirk is promoted to Admiral, and the *Enterprise* prepares to undergo a complete refit.

Stardate 2/1212

Cmdr. Spock refuses an offered promotion to Captain and retires from active duty, entering Star Fleet Reserve. He pursues the Kolinahr discipline on Vulcan.

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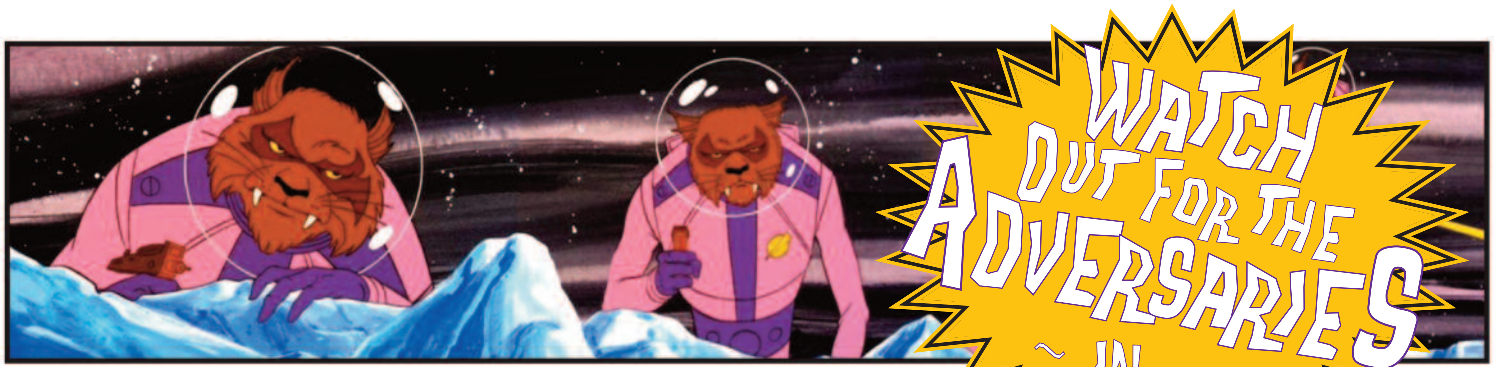

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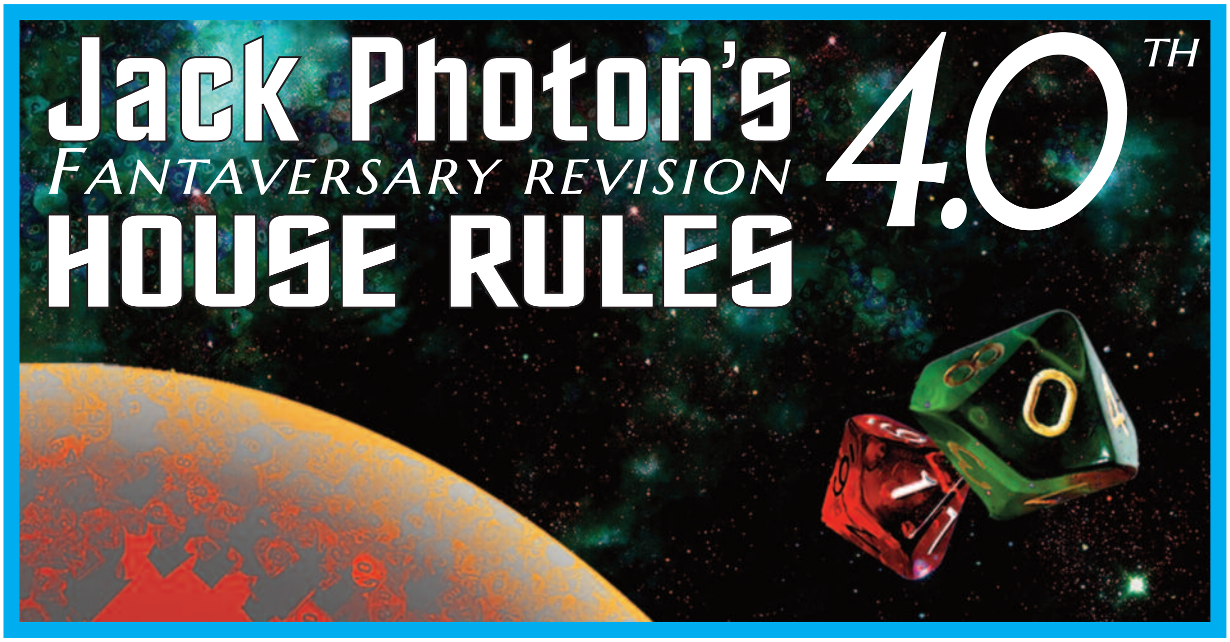

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